PROLEGOMENA

TO THE STUDY OF

GREEK CHRONOGRAPHY

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CONTENTS

INTRODUCTION

The branch of historical learning which the Greeks called chronography is treated fairly narrowly in the following chapters. Theseccollect the evidence for believing that over a period of some six or seven centuries, from the time of Hellanikos to that of Thallos, the Greeks applied, to the history and traditions of their own and the Asiatic mythic and archaic periods, a single mathematical technique, in order to find year-dates for persons and events for which the traditions only provided generation-dates. This mathematical technique was based on a very simple proposition probably invented by Hellanikos; namely, that if synchronisms in traditional narratives or through genealogies could be found for the beginning and end of any two lines of descent, the span of time covered in each case would necessarily be the same, although the number of generations, and therewith the length of the average generation, might differ. The first application of this proposition seems to have been to the archaic dynastic lists of Athens and Sparta, where the generation of the Return in the one case coincided traditionally with the death of Kodros and accession of Medon in the other; and afterthe thirteen reigns of the "perpetual" archons, the decennial archonship was instituted in a generation corresponding to that of the tenth Agiad king in Sparta. Here therefore 13 Athenian generations occupied the same timeaas 9 Spartan generations, so that the number of the years must be divisible by both 13 and 9. The common multiple chosen was 351 years, for 39 x 9 = 27 x 13, and thenceforward the Spartan generation was reckoned at 39 years,

and most Athenian generations at 27 years. Thus from the beginning of the chronographic discipline, the generation of the twins in Sparta began in 1104, and the decennial archons in Athens in 753 B.C.

The following chapters contain the evidence for developments which occurred on the basis of this originally axiomatic Chronographic Model. The evidence is restricted to Greek mythic and archaic, and Asiatic, kinglists, and to such comparable documents as Thucydides' dates for the Sicilian colonies, and the "thalassocracies" on the one hand, and on the other to the Herodotean and Apollodoran treatments of the political and literary histories of the seventh and sixth centuries. The Egyptian lists, other than the Herodotean, and the lists of Macedonian, Alban, and Roman kings are not discussed, nor the results of Biblical knowledge in Mesopotamian chronography; nor for the sixth and seventh centuries is any material collated which is not needed for the discussion of Herodotean and Apollodoran datings. That is, the material discussed is that of the main framework only, where our information is most plentiful; the purpose being simply to elucidate the main characteristics of the chronographic discipline at various periods, and not to undertake a comprehensive modern historical criticism of its results.

For this reason also the discussion of evidence from the chronography for true datings is kept to the minimal amount compatible with the need to understand, as far as possible, the relationship between the chronographers and their raw material.

The discussion of true dates is therefore limited to the following instances: the Agiad generations at Sparta, the Herodotean dates for the seventh and sixth centuries, the western and eastern colonies, and the Mesopotamian traditions. In the first two cases, the problem is this: if an alleged event, such as the Lykourgan reforms, truly occurred, it happened at a true time: was this true time at any stage a part of the tradition used by the chronographers? In the Mesopotamian case, the problem is whether and how far, the literate tradition of natural dating influenced the work of the chronographers. The colony dates are a special case, where true datings cannot be found from the literary sources alone, but where approximately true datings can be found by analogy from the relationships between chronographic and true datings in other cases.

In contrast to the restricted discussions of true dating, there is at various points in the assembly of evidence, a substantial consideration of historiographic concepts. Experience in the analysis of the preserved lists has shown this to be an essential part of the work: the figures of the dates are expressions, in numbers, of statements and narratives also existing, less precisely, in words: before the Roman period there is no evidence in the material here collected of what might be called numerological tendencies, no magic numbers, no Great Years, or recurring sacred periods. Moreover, such changes as occurred in the narratives for which year-dates were sought (as in the story of Lykourgos or the tale of Troy) seem to be without exception due to non-chronographic, historical, social and philosophical causes

such as the retrodating of a new deal to give it historical sanction, and the rationalising of "impossible" narratives.

The arithmetical and textual discussions are for the most part contained in the Appendices, which are for convenience placed together at the end.

The possibility that many archaic and heroid dates were constructed by the historical Greeks has been frequently urged; and the following chapters, in this aspect, continue this tradition of work. But previous attempts to explain the datings have usually assumed one or more figures for generation-lengths as data, whereas the following work assumes that the chronographers had as raw material no such conventional figures, but only the number of generations in the various traditional lines. I owe this reduction of assumptions in the first place to Mr. Birks, who pointed out that these numbers of generations could be abstracted from the traditions, and could form a sufficient basis for arithmetical work. Investigation of the actual figures of the chronographers soon led to the isolation of the Chronographic Model with its LCM reckoning. The second stage lay in the hypothetical attribution to the Greeks of consistency in using the principles of their chronographic discipline, and in this I found a model in Mr. Burn's Dates in Early Greek History (JHS LV 130ff). He also emphasized the historical importance of traditional relative dating, It is impossible to estimate how much I owe to Mr. Burn for his continuous help and interest in the work. Recently also I owe guidance on the archaeology of the Geometric and Proto-Geometric periods to Mr. Dunbabin's letters.

I. The Characteristics of systematic chronography

A. The Chronographic Model

Apollodoros' list of dates for the pre-Socratic philosophers is a notorious example of what may be called "systematic" dating. It is also one of the most interesting in Greek chronography, for in a number of cases there exist indications of other dates, in sources earlier than Apollodoros, and these dates generally are nearer to the probable historical truth. It is thus clear that in these cases at least there was available to Apollodoros information which he could have used for historical purposes, but which he left on one side, preferring instead to make a construction on other principles. It is therefore convenient to make a terminological distinction between dates (witnessed or constructed) based on historical evidence, and those based on these other principles: the first kind may be called chronological dates, the second chronographic.

A most remarkable characteristic of chronographic dates is their apparent precision. This is found even where the evidence at the disposal of the chronographer probably did not give historical warrant for the naming of a particular year; thus Apollodoros not only made Anaximenes' birth occur in the year Thales flourished, and his flourishing in the year that Thales died, but also translated these prose statements into figures equivalent to 585 and 546 B.C. The same precision is found in series of events whose relative dates are archaeologically confirmed, as in the case of the Sicilian colonies;[1]

1. T.J.Dunbabin, The Western Greeks pp.435 ff.

in dates which are known from archaeological evidence to be wrong, such

as the death of Gyges; in dates which duplicate one event, such as the foundation of Kyrene in 757 and 597 B.C.; and in dates for persons or events which never existed or happened, like Ninos of Assyria and the regency of Lykourgos at Sparta. From this we should infer that the apparent precision is not due to the amount of historical veracity contained in the numbers, but to the existence among the ancients of a recognised and rigorous mathematical method or system of translating verbal or generation dates into numerical year-datings.

No ancient author describes or mentions the existence of such a body of method. Herodotus gives a famous example[2] of a translation

2. 2.142

of generations into years, and this passage has been grossly overworked; it is unable to explain the supposed body of principles, and does not provide a foundation even for a substantial number of isolated cases. The enquiry in the following pages shows that the requisite body of principles existed, and, granted its assumptions, provided an exact set of rules for the chronographers; and that, apart from the assumptions, the whole discipline was formally mathematical, proceeding by the construction of a simple model, and elaborating this to preserve the phenomena.

All the systematic chronographers examined below, including Herodotus, use as their basis one simple model, which may be termed the Chronographic Model. This consists of the canonical list of the Agiad kings of Sparta (from Eurysthenes in the second generation of the Return of the Herakleidai, to Leonidas who fell in 480 B.C.) and the list of the Medontid archons of Athens (from Medon to Alkmeon). Whatever the year dates assigned, the chronographic tradition placed

both Eurysthenes and Medon in the second generation of the Return, and made the 10th Spartan generation contemporary with the beginning of the decennial archons at Athens, so that 9 complete Spartan generations occupied the same period of time as 13 complete Athenian generations. Given this datum, the problem was to find a common multiple of 9 and 13 which should also preserve the phenomenon of the generation as the unit. This condition is only fulfilled when the whole period is 351 years, yielding 9 Spartan generations of 39 years each, and 13 Athenian generations of 27 years each. This Model may be set out as follows:

The Chronographic Model
39 x 9 = 351 = 27 x 13

Generation of the Return	SPARTA		ATHENS	
2.	Eurysthenes	1104	1104	Medon
			1077	Akastos
3.	Agis	1065		
			1050	Archippos
4.	Echestratos	1026		
			1023	Thersippos
			996	Phorbas
5.	Labotas	987		
			969	Megakles
6.	Doryssos	948		
			942	Diognetos
			915	Pherekles
7.	Agesilaos	909		
			888	Ariphron
8.	Archelaos	870		
			861	Thespieus
			834	Agamestor
9.	Teleklos	831		
			807	Aischylos
10.	Alkamenes	792		
			780	Alkmeon
11.	Polydoros	753	753	the decennials
12.	Eurykrates	714		
13.	Anaxandros	675		
14.	Eurykratides	636		
15.	Leon	597		
16.	Anaxandrides	558		
17.	Kleomenes and Leonidas	519-480		

When the figure of 39 years had been obtained for the Spartan royal generation as a category, simple extrapolation of the same figures for the generations from Alkamenes to Leonidas provided the necessary link between chronological and chronographic time: the date of any Spartan generation in the Model could be ascertained by adding the requisite multiple of 39 to the base-date of 480 B.C. Thus the period of 351 years could be given the Model termini 1104 and 753, while the generation of the twins was dateable to 1104-1066.

Before examining the ways in which this Chronographic Model was used by the various chronographers, we need to survey briefly the nature and characteristics of a model of this kind, the particular limitations of such a model combined with habitual calculation on an abacus, and the different problems involved (especially in transmission) in transforming an abacus calculation into the shapes required by the constructors of Kanones.

B. The nature and characteristics of a model

The use of models is widespread in the modern sciences, though not all employ them in the same way. Perhaps the most famous astronomical model was that whereby the planet Neptune was discovered; here the model of the solar system was designed to contain all facts of certain categories and compared with the observed reality; discrepancy between the model and reality was described in terms of the categories employed in the model, so that the existence of another planet was inferred before it was observed. In economics on the other hand, the models consist of selections from known facts, and work within the model reveals or defines previously unrecognised or obscure

relationships between the model entities.

The Chronographic Model clearly resembles the economic rather than the astronomic model: of all the available kinglists it selects two, and in the Greek case there is neither the possibility nor the intention of comparing the construct with a historical reality. Additional material may be brought into the field in which the model operates (like the "multiplier" in economics) so long as it is defined in appropriate terms: so Apollodoros' dates for the pre-Socratics and others depend on the construction of lines of spiritual descent from Homer and Hesiod, and the use of one-third of the generation as the unit of calculation(See chapter VII).

C. Chronography and abacus calculation

Habitual calculation on an abacus or with any other concrete numerical units tends, in its elementary stages, to form the assumption in the mind of the calculator that his units are indivisible. This habit of mind was, as is well-known, deep-rooted in early Greek mathematics and most clearly seen in the Pythagorean monad. For the chronographers, the monadic unit is the year, and occasionally this is still found surviving outside the numbers: for instance the author of the Excerpta Barbari emphasizes that the last year of Kroisos immediately precedes, but does not at all overlap, the first year of Persian rule in Lydia. (See Appendix IX). His conventional notation would thus place the fall of Sardis on an imaginary New Year's Eve: but in fact the chronographic year is indivisible, and possesses no such smaller units as months and days, except in one or two examples of outstanding events such as the Fall of Troy, for which the month and the day was sometimes named.

This is however entirely exceptional, and in general the chronographic year is indivisible. In order to maintain this indivisibility of the monadic year as far as possible in modern notation, all chronographic years are here represented by a single figure for a year B.C., the single figure always being that of the year B.C. in which the monadic Olympic, archontic, or other year began. Thus Ol.1.1 is always represented, not by the usual notation of 776-5 B.C., but by the undivided notation of 776 B.C.

The chronographic year is the unit of commensurability between generations of 39 and 27 years, as well as generations of other lengths. The generation itself however is quite a different unit of measurement, being theoretically as variable in terms of years as local acres are in terms of square yards, all its variations however having some sort of relevance to the real facts of inheritance and succession, just as the acres are related to the day's work in ploughing. Moreover, the post-Herodotean generation is divisible, the most frequently used fractions being thirds of 39 and 27.

Through the intermediation of the chronographic year, generations are commensurable with such pentaeteric periods as Olympiads or Panathenaids. Thus 27 Olympiads fill the same period as (27x)4 generations; and in Attika the annual archons begin 39 x 3 years before the first Great Panathenaia (683 to 566 B.C.), and the latter is separated by 39 x 1⅓ = 52 years from the celebration in 514 B.C., at which Hipparchos was murdered.

D. Olympiads as a tool of computation

The nature of the Greek records until well on into the fifth century is such that, apart from one or two important battles, there

are few events of which we know the exact chronological year, much less the month and the day. This is, perhaps, partly due to the absence of dynasties of the oriental type, and consequently of dynastic records. On the other hand, certain dates in Greece may be more easily obtainable than witnesses for the event: for example, it may be more readily ascertained, within a week or so, when the first Panathenaia was celebrated, if it was in 566 B.C., than whether it was in fact in that year, and similarly for the first Olympiad. In spite of much discussion, it has proved as impossible to date the actual celebration of the first Olympiad, or to distinguish the era at which fictitious Olympiads cease and historical ones begin, as it is to find the earliest year B.C., and for the same reason: both the Olympiads and "years B.C." are tools of computation, designed to be continuous in one direction. Our tool is superior to the Olympiads because together with "years A.D." it provides continuity in two directions; the Greeks did not invent the concept of negative Olympiads by which they might have reckoned backwards from the era of Ol.1. But this is a lower technical level merely: from Ol.1 downwards the reckoning was continuous and the years safely and precisely numbered. Because of this precision of numbering the years, the difficulties of assigning events to years was obscured to the Greeks, as well as, often, to the moderns: if the chronographic dates were expressed in our sources in terms of generations before the Persian Wars, the real state of our knowledge, and that of the Greeks, would be much clearer.

E. Beginnings of chronological datings

An examination of the work of the chronographers reveals that certain dates were habitually used, among those available, as earliest chronological or latest chronographic years. In Attic history, the year is 514 B.C., with its chronographic derivatives 566 and 683. The placing of the murder of Hipparchos in 514 rests on the fact that this may be shown by extrapolation from the fifth century to be the year of the Great Panathenaia which best suits the accounts given by the historians. Thus there is no contemporary witness either to the year itself, or to the assumption that the Great Panathenaia in Peisistratid times possessed the same calendrical regulations as in the fifth century. So long, however, as the assumption is known to be an assumption, the date may be regarded as a sound chronological date within that limit, and the earliest certain chronological date in Athenian history. (For possible earlier true dates, see chapter V below.)

For the more general history of Greece, the chronographers use Spartan dates, usually 519 B.C., the first monadic year of the generation of Kleomenes and Leonidas. This year is used by Thucydides[3]

3. 3.68

as the date of the alliance of Athens and Plataia, an event which Herodotus had already associated with Kleomenes.

It would appear therefore that chronological years begin in Athens in 514 B.C., and in Sparta and Greece generally about the same time. Before that there are numbered years in terms of Olympiads (whether Olympiads were actually being celebrated or not) back to 776 B.C., and named archontic years in Athens back to 683 B.C. The

Olympiad reckoning is a fifth-century invention, and so probably also is the upper terminus of 683 B.C. for the archontic years at Athens. We shall see later (chapter V) that the dates for Peisistratos express generation reckonings, and those for Solon also: if this evidence is accepted, it demonstrates that public records before the Kleisthenic revolution were not of the kinds that required the precise knowledge of the archontic years claimed by our sources.

F. The Problems of commensuration.

It is possible perhaps now to consider a little the unformulated assumptions with which the Greeks approached their chronographic problems. They no doubt in the first place believed much more of their traditional history that we find it necessary to credit: even if they were aware that king Eunomos of Sparta was an inference, they accepted the inference as sound, and did not in the least doubt his existence. Given then the acceptance of the various kinglists, that is, the local traditions of each community (however edited), the first problem was to establish precisely, in terms of selected lists, the processes and events which affected Hellas as a whole.

i. the Chronographic Model

We should probably infer that the Chronographic Model was older than Herodotus from the fact that his chronography uses the 39 and 27-year generations, as well as others for Lydia, Media and Egypt (see chapter V). We should probably also infer that it was later than the Lykourgan Eunomia at Sparta (which is dated by the archaeologists to the early sixth century), because the Spartan

kinglists include the name of Eunomos, who was probably invented after the Eunomia. The Chronographic Model therefore belongs to the period 550-450, which saw the rise of Greek mathematical theory in the Pythagorean school. This is consonant with the chronographic use of the monadic year: and the assumption that generations are translateable into exact numbers of years would, in a Pythagorean context, appear no stranger than the similar translation of music into numbers.

ii. the third of a generation

The datings used by Herodotus show no trace of the use of the third of a generation which is fully developed in Thucydides' dates for the Sicilian colonies. We might infer from this that the unit of calculation was invented too late for Herodotus to use it. His dating of Sadyattes' reign and Alyattes' accession suggest that he used the difference between 39 and 27 (12 years) to express a small part of a generation.

The third of a generation is first used, according to our sources, in Thucydides' dates for the western colonies. This may be of importance in the attempt to trace the growth of chronographic concepts, for, although Apollodoros and his successors use the notion widely, it is in the west that it met a need which would early be obvious, namely, a unit of calculation in terms of which the foundation dates of the colonies could be commensurably stated. Nine years is one-third of 27, and at the same time provides points of dating which cannot be more than 5 years away from the true date of any event of which the date is known; and in Greek conditions of the greater part of the fifth century, where there was no commonly accepted definition of the termini of a year, the third of a 27-year generation

makes national chronography for the period 750-500 possible, by providing a unit of commensuration.

Since the archaeological evidence confirms the relative dating of the Sicilian colonies, we must conclude that the relative dates of the foundations were known before they were translated into chronographic dates. For the third of a generation has the further advantage over the generation itself, that it is simply a group of years, and is not so closely associated with the actualities of human reproduction. Thus it was not necessarily at all dependent on genealogies, and indeed is more useful as providing commensurable years than commensurable generations.

iii. the Olympiad

In the Thucydidean chronography of the Sicilian colonies only the 27-year generation is used, but when the notion of one-third of a generation began to be employed in mainland Greece, it would immediately be confronted with the existence of the 39-year generation. The difference between the two thirds, of 13 and 9 respectively, is 4 years: and this fact may have been the initial stimulus which led to the formulation of the Olympiad and the Olympic year as units of chronographic measurement. As soon as attention was directed to the suitability of the Olympiad, it would be noted that Olympiads could be used to make the generations of the Chronographic Model commensurable. This fact, together with the Olympic year itself, still further removed the chronographic unit of mensuration from any necessary dependence on real generations: and it would seem to be intentional on Hippias' part that he placed the Olympic Era in 776, in the generation when the Athenian dynasty of the Chronographic Model comes to an end.

iv. The Corintho-Attic Construct

Another construct of the same type as the Chronographic Model seems to link the post-Dorian monarchies of Corinth and Athens. Our sources give 322 or 326 years for the first eleven kings, who make nine generations, in Corinth. The first of these, Aletes, killed the Athenian Kodros; the last preceded the founding of Syracuse. The nine Corinthians thus occupy the same period as twelve Athenians, and the Corinthian average generation is 36 years. The two lists may be placed side by side as follows:

	Corinth	Athens	
36 x 3 = 108	Aletes Ixion Agelas	Medon Akastos Archippos Thersippos	27 x 4 = 108
36 x 3 = 108	Prymnis Bacchis Agelas	Phorbas Megakles Diognetos Pherekles	27 x 4 = 108
36 x 3 = 108	Eudemos Aristodemos, etc. Telestes	Ariphron Thespieus Agamestor Aischylos	27 x 4 = 108
	1 Automenes		
36 x 2½ = 99	the prytaneis	Alkmeon and the decennials	36 x 2 = 72
		whence 39 x 4⅓ to 514 B.C.	

From this it appears that although the Corinthian and Athenian dynasties were conumeral, in that both occupied 324 years or thereabouts, they did not exactly synchronise. The probable reason for this is that Aletes killed Kodros, Medon's father: that is, he acceded before Medon did. The smallest time that could be allowed for this was one monadic year, and so at the end of the Corinthian dynasty the one-year reign of Automenes is distinguished from the ninety yearly prytaneis who succeeded him: the Corinthian monarchy

in this model thus begins and ends one monadic year earlier than the Athenian.

This model is an interesting advance on the primary Chronographic Model because it incorporates, in the most general terms to which our sources allow themselves to be reduced, the conscious "preservation of the phenomenon" in the priority of Aletes to Medon. The occasion for the formation of this construct seems to be the modification of the old Chronographic Model by in the fourth century Eratosthenes, which made its Spartan generations incommensurable with the Athenian ones, although retaining the figures of 39 and 27 years.(see chapter IX). The Corintho-Attic construct provides the Corinthian list as an intermediary to which both the Athenian and the new Spartan datings could be related; and its effect on Athenian chronography may be seen in the difference between the original of the Attic list in the Excerpta Barbari, which uses the Chronographic Model, and Kastor's Athenian list, based on the Corintho-Attic construct. (See Appendix III)

Once the model technique was developed to this stage, two further fields of work were open: the extension of the chronographic method to other material, e.g. genealogies before the Return, successions of philosophers, Asiatic dynasties; and the developments from the Model necessary to preserve the phenomenon of a natural, historical appearance. From these developments in turn came the possibility of dating world history, in which the eras established by Greek chronography became of oecumenical importance. The most important of these eras for our immediate sources (Eusebius and his derivatives) was the first Olympiad, primarily because of its

technical importance in providing a year commensurable with different calendars, but also because it marked the beginning of the post-monarchical period, at first by being placed within the last generation of the Corinthian and Athenian monarchies, and, by the time of Eusebius, because it was believed that the Spartan, Corinthian, and Athenian monarchies all ended about this time. For world chronography also the generation of the first Olympiad became the period of the founding of Rome, of the continuous Lydian records, and the beginning of Greco-Egyptian trade under Bocchoris, as well as the founding of the first western colonies.[4] Archaeolggical

4. e.g. Syracuse in the Marmor Parium (see chapter VI)

evidence now suggests three important developments about the fifty middle years of the eighth century: the foundation of Cumae and her successors in the west and of Al Mina in Syria, the first beginnings of oriental influence through Vannic metal work and the emergence of the first Orientalising pottery, and the earliest specimens of alphabetic writing. In assigning, therefore, a great importance to this period the chronographers were perfectly correct in general, however dubious their detail, and it seems probable that their historiographic view was, in the ultimate resort, founded on generation-reckonings.[5] This seems to be true at least of the

5. The archaeological evidence mentioned is, it is clear, not directly related to the traditional evidence; though both series of statements may be generalised to form the same conclusion, namely that the mid-eighth century was of decisive importance in Greek development. The indirect reflection in the traditions of the archaeologically evidenced processes at work is a matter for historiographic study.

Sicilian colonies; before the theory is acceptable for the mainland and east Greeks also we shall have to consider the nature of a generation and the peculiar errors to which generation-dates are

prone. First of all, however, we may complete these notes on the arithmetic tradition by considering the dangers inherent in the process of transferring chronographic dates to the form of kanones, for most of our figures have passed through this medium.

G. The peculiarities of kanones

When reckoning with an abacus or other concrete numbers, the chronographer begins with the assumption that his years exist, and their number is only limited by the size of his instrument. His task therefore is to divide and label his years, and he can maintain a perfect discipline over himself by making an abacus which will contain the number of years he requires and no more.

The writer of kanones on the other hand starts with a blank sheet of paper (or its equivalent), and has first of all to create his years, by writing down one or more series of numbers, which he must previously have defined outside his technical work on his tables. From 776 B.C. onwards, the Olympiads served as a simple basis which required no external calculation: the canonographer simply wrote down his continuous series of numbers and inserted the events accordingly. Before Ol.1, Eusebius has the great advantage of using years of Abraham; Kastor, who also wrote kanones, presumably had not this technical aid. In its place, his figures show that he had a chronographic period of 1404 years before 683 B.C., though whether he actually wrote down these 1404 numbers in his kanones, we do not, of course, know.

The tradition of setting out kanones as tables of commensuration for different local years and reigns of kings, as well as tables of

events, lingered long in the study of ancient datings. Eusebius painstakingly notes every year of every one of his kings; fifteen hundred years later Clinton innovates by omitting individual Olympic years, years of Nabonassar, years of Rome, and years of the Julian period, and by observing that "the only measure of time that should be adopted for all ancient history are the years before the Christian era." Where the commeasured years xrx belong to large or infinite series, tables of commensuration are of course useful and not notably liable to error; but where the years belong to short series, such as reigns of individuals, the mechanical copying of successive numbers running in different series in different columns may be productive of large numbers of small errors, overruning the calculated chronographic terminus of a reign by a year or two. These errors may be corrected within the kanones by taking an equal number of years from the next or a succeeding reign, so that such small differences in our dynastic lists copied from kanones may be ascribed to the canonographer rather than the chronographer. Onx the other hand, because of the ease with which such slips when made could be compensated, we should not suppose that the canonographer could by simple error much distort the calculations, within a dynasty, of his chronographic source.

Another way in which kanones may misrepresent chronographic sources is by the misplacing of dynasties and periods. So Eusebius makes the Spartan monarchy end about the time of Ol.1 in his Kanones, while in his Chronographia Ol.1 falls in the 10th year of Alkamenes and Theopompos; and so too the Corinthian monarchy ends about the same time in the Kanones, while Diodoros dated its last year in 748 B.C.

Smaller periods may also be misplaced: all the sources except Eusebius place the murder of Hipparchos in 514 B.C., but the Armenian Eusebius dates it to 519. Here it would seem that a period reckoning down to the base-date 514 has been taken as though it referred to the base-date 519, e.g. if one source said that the fall of Sardis (in 541) was 27 years before the murder of Hipparchos, this period has been applied to the Apollodoran(?) dating of Sardis in 546, and the Hipparchos incident moved up five years.

The cumulative effect - and to some extent also the cause - of errors of this kind is the simplification of historiographic concepts. The first Olympiad for Eusebius is not only the first strictly dateable year, but also marks the beginning of the post-monarchical period in Greece, a period whose dates therefore did not depend on the calculations of reigns, but were "authentic" in the technical sense and more besides; the relief felt at reaching this era is marked by Jerome: Ab hoc tempore graeca de temporibus historia vera creditur. Nam ante hoc ut cuique visum est diversas sententias protulerunt. The Armenian remarks in the same sense: Et ab hoc tempore Graecorum chronographia videtur authentica, nam ante haec unusquisque ut ipsi placebat sententiam dabat. These sentences presumably translate the comment of Eusebius himself.

Another result of this simplifying tendency may often be suspected, but rarely proved, in our immediate sources. This is the modification of details drawn from one chronographer to the termini given by another. Thus the composer of a book of kanones might have historiographic views which none of the chronographic

sources singly displayed; in such a case formal eclecticism is only the description of the technical means employed to express the new historiographic concept.

This is important in the case of Eusebius and the author of the Excerpta Barbari. For them Greek history in the period usually treated by the chronographers was subordinate in interest to Asiatic, and especially Biblical, history and datings: Eusebius uses the birth of Abraham as his era; the Barbarus uses a date for the Exodus as the commensurable era for the dynasties of Sikyon, Argos-Mycenae, and Athens. Eusebius and his followers express the historiographic view which characterised Plato as Moses in Attic, and consequently the attitude of the canonographers to datings are quite different from those of the chronographic period. Especially important in the formation of mediaeval and modern assumptions about Greek dates before 500 B.C. is the Christian acceptance of Biblical datings as revealed truth: by the time Biblical and Greek history was woven into one common titledeed, the Greek dates, as selected, were by assumption as infallible as the Hebrew. It is now only a century since Clinton and Grote still found it necessary to demand "extrinsic evidence" before accepting the vulgate chronology, and its defenders are still to be found. It should therefore be noted that, problems of revelation apart, the profane circumstances of the late Hebrew and Greek datings were quite different: the chronicles of Judah and Israel were formulated in two communities only, so that only their forms of years are involved; there was no general problem of commensuration, but merely technical problems of translation from one calendar to another.[6] Moreover, since

6. E.R.Thiele in Journal of Near Eastern Studies 3 (1944) 137ff

these communities were literate, there was no question of generation-dating for this period, or its translation into years.

Eusebius, in his Greek datings, purports to set forth the lists of his chronographic sources, and their canonographical form, in the Chronographia and Kanones respectively. Two of our most important sources other than Eusebius are abstracts from Kanones. In abstracting lists from Kanones the omission of names is easy: it occurs several times in the Excerpta (where the author corrected these errors, when he noticed them, by placing the omitted name at the end of the dynasty) and probably in the Chronographeion Syntomon. The Excerpta also often summarised statements about durations and termini, sometimes drawing one more than one source: he notes, for instance, a Mycenaean lower terminus which does not belong to his version of Greek history. The Chronographeion Syntomon also shows this form of eclecticism by taking different dynastic records from different chronicles.

After this survey of places where some errors in transmission are to be found, and others suspected, it is necessary to enter a warning against assumings sufficient errors to harmonise all our sources. We really have no reason to believe that only one elaboration of the Chronographic Model was possible; and experience shows that the only person who is more accurate - in the pedagogic sense - in his knowledge of date than the schoolboy is the schoolmaster. While therefore errors of omission, exaggeration, and compensation undoubtedly exist, we should not expect to find so high a liability to error as would have destroyed the scholastic usefulness of our texts to the people who copies them, and for whom the copies were in the first place intended.

II. The Nature and Origins of the Chronographic Generations

A. Considerations affecting the definition of a generation

The acceptance of the generation lengths resulting from the use of the Chronographic Model implies that the Greeks had no dogmatic view about the length of a generation: Herodotus' figure of 33 years is the arithmetic mean of 39 and 27 slightly lengthened to be commensurable with centuries. Herodotus' definition moreover is looser than the kind of definition usually given in the literary sources, which refer to male marriage at the age of 30, or, in Herakleitos' case, to 30 as the youngest age at which a man can become a grandfather. Both these imply that the generation was regarded as the male reproductive period, and for historiographical and chronographic purposes, the years selected from the life of an individual to equate to this period would be, roughly, the years from his entry into public life to his retirement or death, which in reproductive terms would be from the birth of his eldest surviving son to that of his eldest surviving grandson. Male marriage at 30 then implies a reproductive period of at least 33 years; but becoming a grandfather at 30 gives a reproductive period of 15 years.

Some time ago, with the assistance of Messrs. J. Birks and G. Wylie of Glasgow, I made an analysis of male reproductive periods found in Moslem polygamous dynasties, mediaeval and modern European dynasties and noble houses, and some of the lines of Scottish clan chieftains. The analysis demonstrated the existence of two groups: the polygamous and the monogamous lines. We accepted the actual conditions of succession as historically shown; that is, we made no attempt to define the actual date of

birth of the first-born son whether he survived or not, but took birth of eldest girls, infantile mortality, assassinations by successful fraternal rivals, etc. as a part of the data, so that the result was a definition not of the natural but of the "socially necessary" male reproductive period. The polygamous dynasties of more than five generations were constant at about 21 to 23 years. The monogamous lines varied from a little less than this figure in one Scottish line to over 30 years in the house of Savoy: that is to say, the extremes were found on the one hand in a society with several forms of marriage and divorce, and one the other among the Catholic nobility. Moreover, occasional female generations in an otherwise purely male line made no difference to the average of the line in the majority of cases. The reason for this phenomenan is that in monogamous societies the male reproductive rate is slowed down to the female: whereas a polygamous youth may produce a son who survives within a year of attaining marital status, this is much more unlikely for his monogamous counterpart.[1]

The conclusion to be drawn from this investigation is that the Greek generation-lengths must be examined in relation to the organisation of the Greek family, with particular reference to laws of divorce and succession.

B. The Athenian anchisteia.

Our knowledge of the organisation of the Greek family comes almost entirely from the fourth-century law-court speeches on the Athenian inheritance laws.[2] From these it is possible to compose

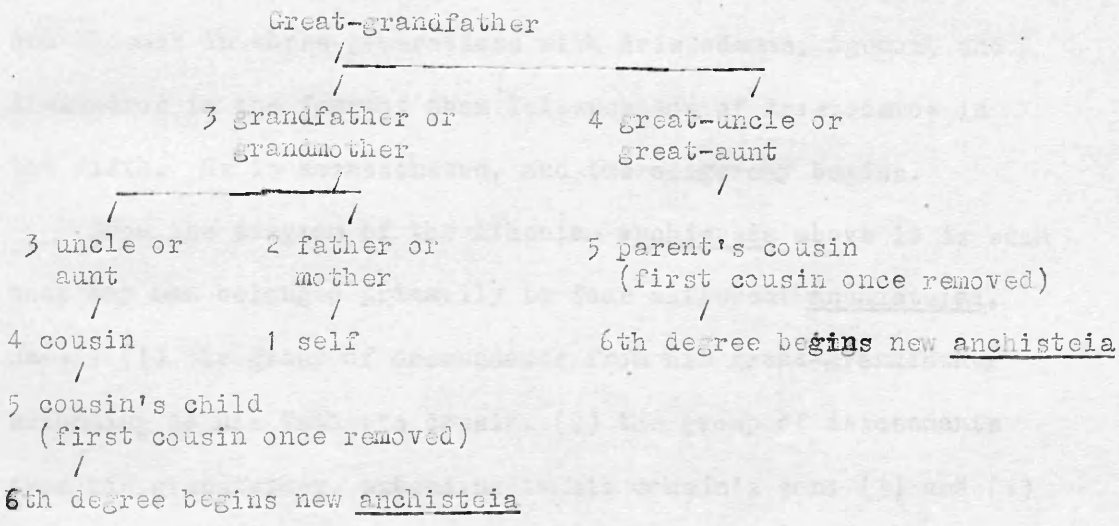
2. See e.g. Wyse, Isaios, and for a very general comparative study Seebohm's Structure of Greek Tribal Society

1. I am informed by Mr. Wylie that it is now theoretically possible to perform the mathematical calculations necessary to determine points of time at which individuals in such a series as the Spartan kinglists might be found to be truly alive. But the process would be extremely complex and so laborious as to require at more than one stage the use of electrical calculating machines. Moreover, in view of the nature of the lists, it would appear that such calculations could serve no historical purpose.

a probable general definition. The social unit corresponding to our family was termed the anchisteia, and comprised all relatives through both male and female lines up to and including the first

through both male and female lines up to and including the first

cousin once removed, whether the first cousin of a parent or one's own first cousin's child. The common ancestor of the members of one anchisteia was thus the great-grandfather, e.g.



All legitimate sons had equal rights of succession, and it would appear that if their legitimate brothers agreed, illegitimate sons might be given a portion of the paternal estate. Marriage within the family was of course encouraged by these inheritance laws.

C. More primitive forms of the anchisteia

There are two pieces of evidence which suggest that the Athenian was not the only form of the anchisteia in Greece. One of these is literary, and refers to Corinth; the other comes from a Halikarnassian inscription.

At Corinth, Diodoros[3] alleges that after the foundation of the Herakleid monarchy by Aletes, the eldest surviving male[4] among

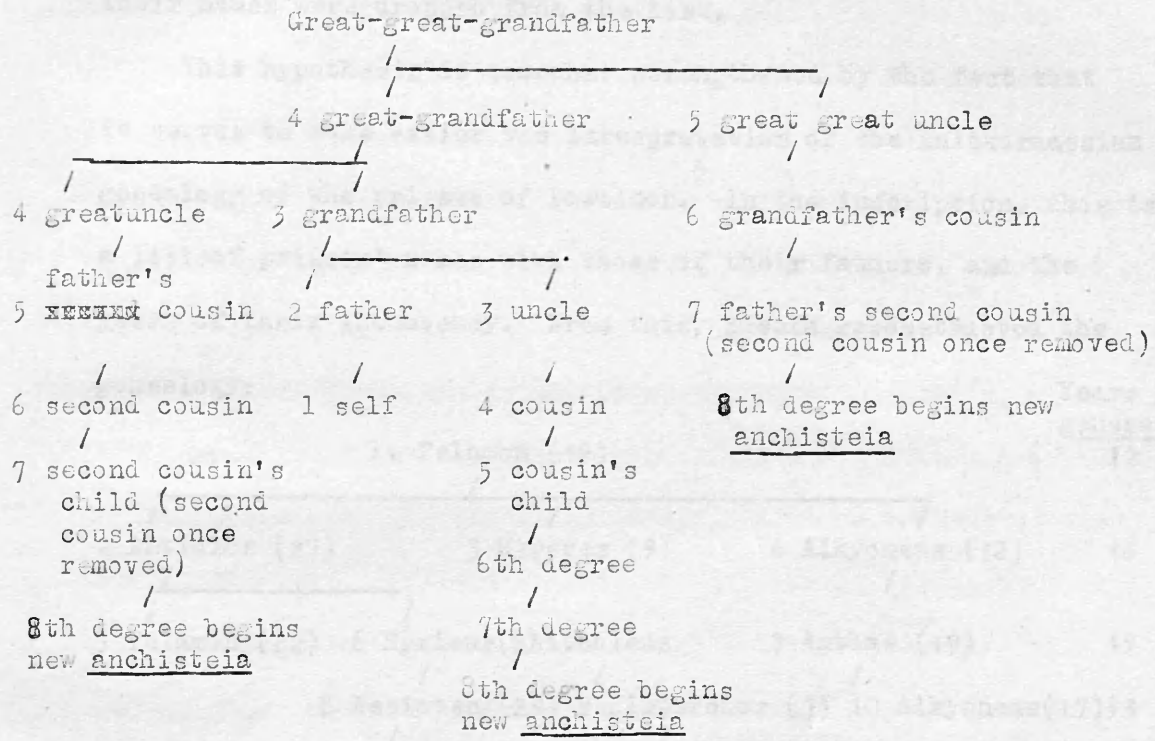
3. 7.9.3

4. ὁ πρεσβύτατος ἀεὶ τῶν ἐκγόνων: compare the Deinomenids

his descendants succeeded. Among these however Bacchis was so outstanding that thenceforth the kings were called Bacchiadai: these ruled for five generations. Thereafter the Bacchiadai, then two hundred in number, organised themselves as an oligarchy, having yearly office bearers. Thus we have Aletes and his successors Ixion, Agelas, and Prymnis, making four generations; Bacchis, Agelas, and Eudemos in three generations with Aristodemos, Agemon, and Alexandros in the fourth; then Telestes son of Aristodemos in the fifth. He is assassinated, and the oligarchy begins.

From the diagram of the Athenian anchisteia above it is seen that any man belonged primarily to four different anchisteiai, namely (1) the group of descendants from his great-grandfather extending to his father's cousin; (2) the group of descendants from his grandfather, extending to his cousin's son; (3) and (4) the same groups of relatives on his mother's side. (In addition, he was also a member of the anchisteiai of his two grandmothers, but these groups of relatives were probably rarely called into corporate action by the extinction of all the first four anchisteiai and may for practical purposes be generally neglected, though the grandmothers are sometimes important for girls.) Each of these groups contains all members in three generations, and as it were begins anew with each fourth generation, where the direct heir is cousin's child to his most distant collaterals. In Corinth however the names are not grouped in threes, but in fours: Bacchis is the fifth descendant from Aletes, Telestes the fifth from Bacchis. This suggests that the Corinthian anchisteia was one generation longer than the Athenian, so that the most distant heir would be the second

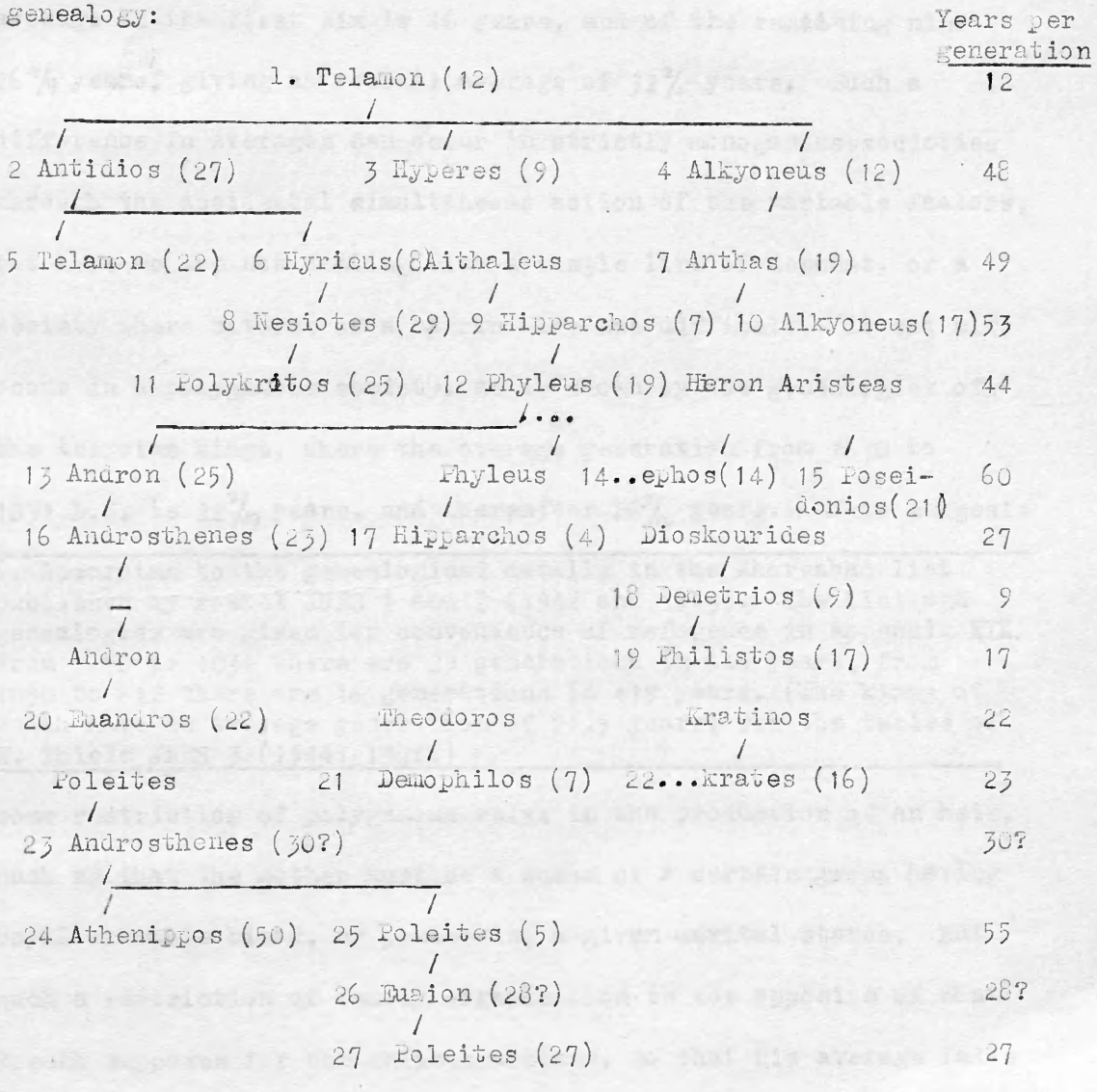
cousin once removed, e.g.



In this organisation each man belongs primarily to three anchisteiai on his father's side and three on his mother's; and from each group of three overlapping anchisteiai, four new ones emerge. If we now place Bacchis in the great-great-grandfather's place, the father's is occupied by Aristodemos, the uncle's by Agemon, and the father's cousin or father's second cousin's by Alexandros. The self's place is taken by Telestes, who should begin a new anchisteia. In the tradition however, Telestes was assassinated, and the derivative Bacchiad anchisteiai combined to form an oligarchy. The three kings of the father's generation were then perhaps remembered because they represented an attempt to keep the Bacchiad anchisteia together as long as possible without changing or supplementing the anchisteia organisation: there was not the same need to remember the

collaterals who had reigned in previous generations, so perhaps their names were dropped from the list.

This hypothesis is somewhat strengthened by the fact that it serves to make easier the interpretation of the Halikarnassian genealogy of the priests of Poseidon.[5] In the inscription, this is a list of priests' names with those of their fathers, and the years of their incumbency. From this, Boeckh reconstructed the genealogy:

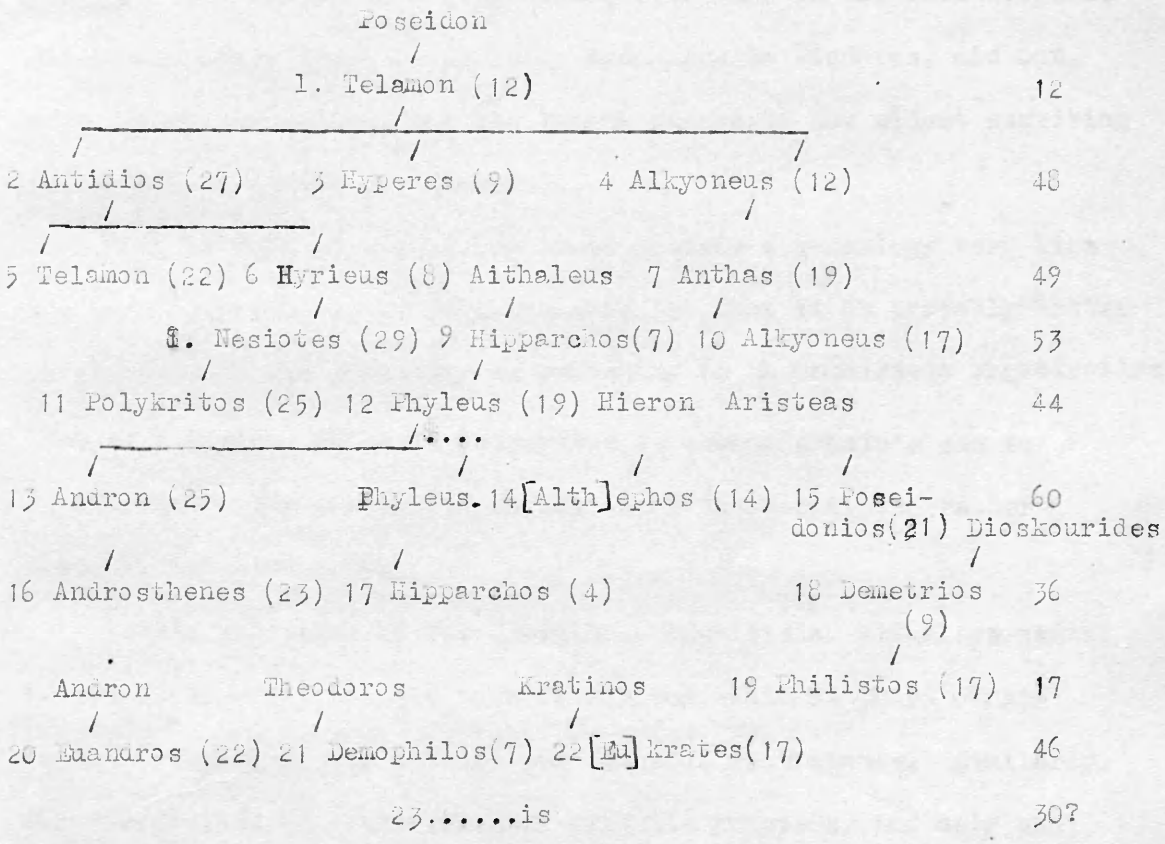


5. CIG 2655; Dittenberger Sylloge 1020

When reconstructing this genealogy, Boeckh seems to have had in mind the Athenian gentile priesthoods on the one hand, and the Herodotean generation of 33⅓ years on the other. Consequently, although his reconstruction admits six cases of filial succession, it also appears to admit succession by a kinsman in the 21st degree (23 Androsthenes succeeds 22...krates). Moreover, the character of the genealogy changes sharply after the sixth generation: the average of the first six is 46 years, and of the remaining nine 26 4/9 years, giving an overall average of 32 2/5 years. Such a difference in averages can occur in strictly monogamousssocieties through the accidental simultaneous action of the variable factors; but here we are not dealing with a single line of descent, or a society where divorce of a barren wife was difficult. It can also occur in a polygamous society, as is shown by the genealogies of the Assyrian kings, where the average generation from 1670 to 1031 B.C. is 22 2/29 years, and thereafter 26 3/11 years.[6] This suggests some restriction of polygamous rules in the production of an heir, such as that the mother must be a woman of a certain group having royal or noble blood, or possessing a given marital status. But such a restriction of family organisation is the opposite of what Boeckh supposes for the Halikarnassians, so that his average falls as the degrees of kinship increase in the reconstruction, but the propoption of cases of filial succession increases in the original.

6. According to the genealogical details in the Khorsabad list published by Poebel JNES 1 and 2 (1942 and 1943). The list and genealogies are given for convenience of reference in Appendix XII. From 1670 to 1031 there are 29 generations in 640 years; from 1030 to 612 there are 16 generations in 419 years. (The kings of Judah have an average generation of 21.5 years: see the tables of E. Thiele JNES 3 (1944) 137ff)

Dittenberger's reconstruction of the genealogy allows for a break in the stone after the name of 22 Eukrates (17 years) and a certain 23....is (30?) in the first column, and (d) Poleites II(27) in the second column. His reconstruction of the genealogy is:



The remaining names are placed in the second to first century.

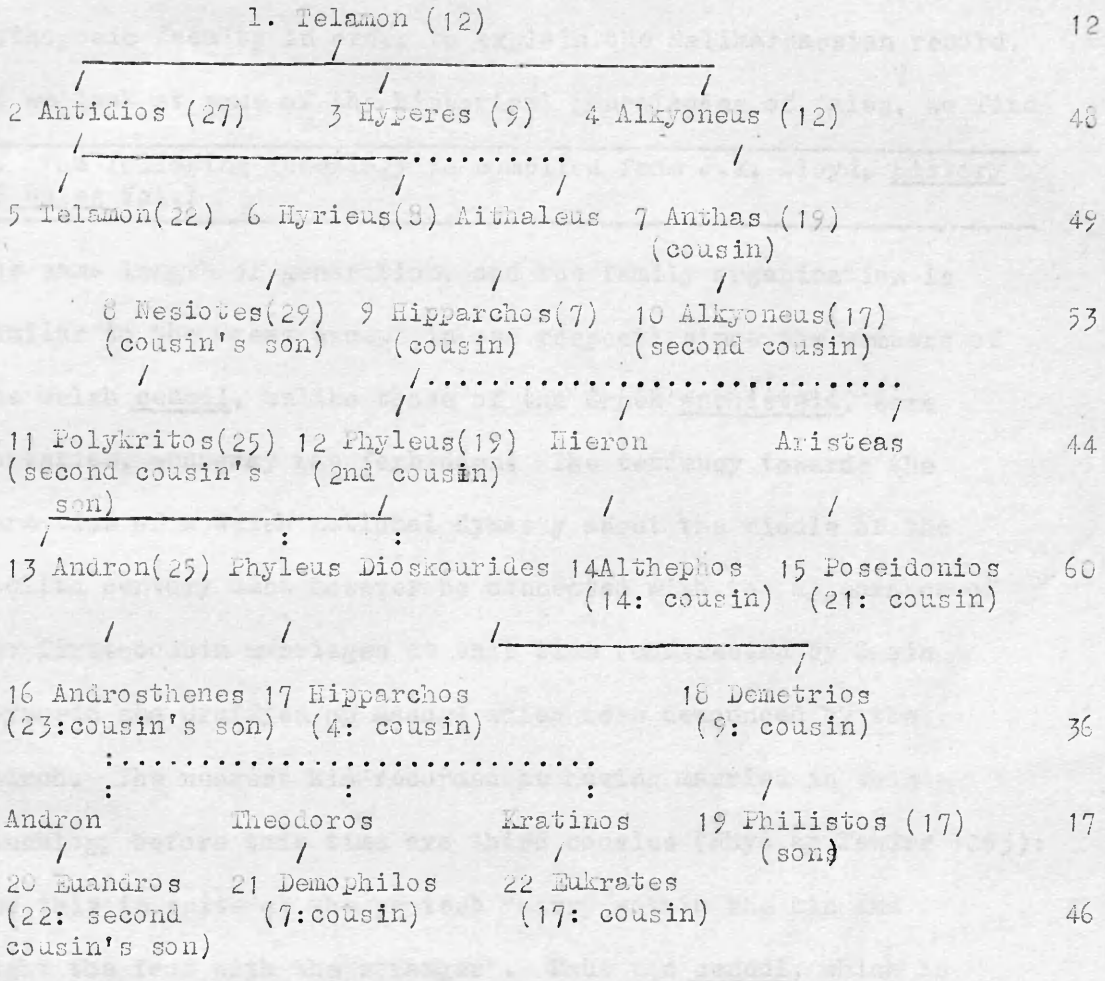
This reconstruction seems to admit the possibility of inheritance by a kinsman in the twelfth degree (17 Hipparchos by 18 Demetrios), immediately followed by a case of filial succession. Such irregularity in custom is not at all easily accounted for, especially since the next priest may, on this reconstruction, be kinsman of Philistos in in the 15th degree, so that it is clearly not to be inferred that there was a lack of members of the kinship group concerned and Philistos the only surviving member of the group. The tendency for gentile priesthoods in Athens to recur in a single male line begins to appear

about the fourth century (thus marking another stage in the evolution of the oikos) and is well established at Halikarnassos by the second. The Medontid archons of Athens should be about contemporary with the early priests of Halikarnassos, and they were members of the Medontid phratry: they appear as a single male line only in the late sources. The contemporary kings of Corinth, according to Diodoros, did not have filial succession, but the throne passed to the eldest surviving descendant of Aletes (or Bacchis).

Such a rule of succession would produce a genealogy very like the early generations at Halikarnassos, so that it is probably better to reconstruct the genealogy as belonging to an anchisteia organisation than to a genos. Since 11 Polykritos is second cousin's son to 10 Alkyoneus, the anchisteia should be of the Corinthian rather than the Athenian form.

Within the terms of the Corinthian anchisteia, Aithaleus cannot be son of Hyperes, because then 12 Phyleus would be third cousin to his predecessor and outside the range of inheritance. Similarly, the direct line of Alkyoneus ends with his grandson, and only one generation intervenes between 16 Androsthenes and 20 Euandros, while the grandfather of 19 Philistos must be brother to 13 Andron. In the other cases of supposed brothers in the reconstruction below supposed cousins would serve equally well.

In this reconstruction, the earlier genealogy contains two anchisteiai and the first generation of a third. The first comprises priests 1-10 in 162 years; the second, priests 11-19 in 157 years; the odd generation, priests 20-22 in 45 years. Thus in the first anchisteia the average horizontal generation is 40.5 years, in the second 39¼ years (and in the third 45 years).



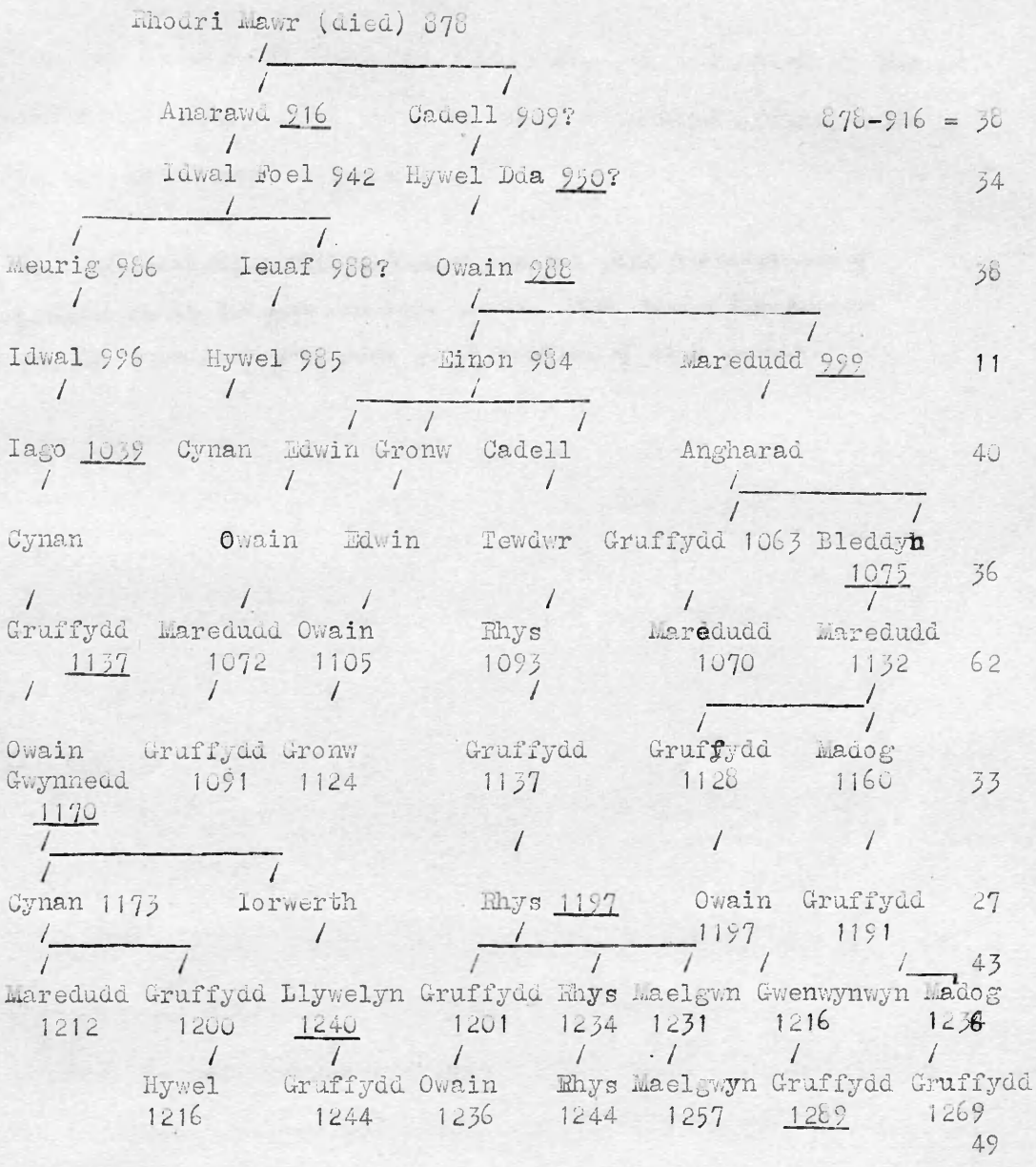
This is very near indeed to the chronographic 39-year generation at Sparta, and suggests that there were social, non-mathematical, reasons (not indeed for the invention of this length of generation, but) for its ready and general acceptance.

Boeckh hinted his suspicions that the early generations of the Halikarnassian genealogy were fictitious, and that this accounted for the very long generations in this early period. But this type of family organisation and laws of inheritance which take no account of primogeniture have produced generations of the same length elsewhere. There is thus no need to have recourse to a

mythopoeic faculty in order to explain the Halikarnassian record. If we look at some of the historical genealogies of Wales,[7] we find

7. The following genealogy is compiled from J.E. Lloyd, History of Wales Vol.I

the same length of generation, and the family organisation is similar to the Greek except in one respect: since the members of the Welsh cenedl, unlike those of the Greek anchisteia, were Christian, endogamy was forbidden. The tendency towards the formation of a Welsh national dynasty about the middle of the twelfth century must however be connected with the appearance of two first-cousin marriages at this time (contracted by Owain Gwynnedd and Gruffydd ap Madog) which were denounced by the church. The nearest kin recorded as having married in this genealogy before this time are third cousins (Rhys ap Tewdwr 1093): and this in spite of the proverb "Marry within the kin and fight the feud with the stranger". Thus the cenedl, which is often correlated with the genos or clan, should rather be regarded as parallel to the anchisteia. The cenedl also, like the anchisteia but unlike the genos, was limited to a certain degree of cousinhood, 6th cousins in Gwynnedd and 5th cousins elsewhere, but property inheritance laws included second cousins only. In view of these considerations, it is not surprising that the average generation in this group is $38\frac{3}{11}$ years, or that the linear generations of the senior branches show quite different figures: from Anarawd to Cynan (878-1005) an average of $25\frac{2}{5}$ years, and Cadell to Gruffydd (878-1091) $26\frac{5}{8}$ years. It is, of course, these figures which give the dimensions of the linear male reproductive rate.



These Welsh comparisons suggest that the definition of ganerations as averaging 27 years in one case and 39 years in the other emphasize in the former figure the importance of the eldest son, and in the latter that of the youngest. It is hardly surprising therefore that the arithmetic mean of these figures should be nearly the generation-length taken by Herodotus, nor that this figure expresses also the kind of

generation we meet in Athenian pedigrees, for the dates of the Athenians are dates, for the most part, of public office, open alike to eldest and youngest sons.[8]

8. I am informed by a Chinese friend that the 73rd descendant of Confucius is at present resident in the USA. Since Confucius fl. 500 BC, this pedigree gives a generation of 33·3 years.

III. The Archaic Dynasties

A. The Spartan list

In Appendix I the chronographers' accounts of the Spartan king lists are examined, with the intention of establishing the text of Apollodoros, and the source of the one non-Apollodoran version, which is there attributed to Kastor. The following discussion proceeds on the basis of the conclusions therein contained.

Following the nature of our sources, Spartan history before the fifth century is of three types,(1) the narrative history of the sixth century, mainly based on Herodotus (for which see below, chapter 5); (2) the narrative history of the period of the Messenian Wars, mainly based on Pausanias, and the dates therefor given by Pausanias and the Eusebian kanones, with some surviving fourth-century datings; (3) the king lists for the earlier period, aided by traditions of varying quality preserved by Pausanias and others. The main flavour of the sources for each period is thus chronographic for the earliest, poetic for the Messenian period, and Herodotean for the sixth century, so that the common factors are practically reduced to two: the name of Sparta, and the variable king lists, and we have no evidence that the ancients, any more than ourselves, possessed any consistent notion of the history and development of Sparta.

The work of the chronographers is therefore particularly important, because it follows from the nature of mathematics as a precise instrument that a chronographer could not express

an imprecise historiographic view: if variant traditions existed he must choose one or the other, or make a precise combination. This precision, as we have already noted, comes from the nature of the instrument, and does not reflect the amount of historical veracity in the tradtion, and this has been amply proved in the Spartan case. The traditional Lykourgos is given by the chronographers some precise dates in the ninth century; but the archaeology of Sparta dates the decisive reorganisation of the community early in the sixth century - that is, the Lykourgos of the traditions did not exist, while another "Lykourgos", wholly omitted in our sources with the probable exception of Herodotus, did exist. The problem of the Spartan traditions thus becomes very complex, and any satisfactory treatment of the chronography must discuss, not only the mathematical method whereby the chronographers reached their figures, but also the historiographic view which these figures express.

i. The chronographic 39-year generation at Sparta

The 407 years given by Porphyry, Synkellos, Censorinus, Clement and Tatian as the number of years attributed by Eratosthenes and Apollodoros to the period from Troy to the first Olympiad may be dated 1183-777 in monadic years.[1] Of these,

1. See below, chapter 7

10 years belong to the generation of Theopompos and Alkamenes beginning with the accession of Theopompos in 786: the odd seven years may be reasonably attributed to the reign of Aigisthos, who is so dated in the Odyssey.[2] This leaves

2. 3.304

390 years for the intervening period.

A synchronism of the generations of Mycenae and Sparta is given in Pausanias' Spartan history (3.2.1), where Agis is said to be contemporary with Gras. But the chronographers give Agis a reign of 1 or 2 years, thus almost omitting his generation: and conformably with this, Pausanias (1.41.2) places the death of Hyllos in the time of Orestes. Diodoros (4.58) places the death of Hyllos 50 years before the Return, i.e. 30 years after Troy and so in the reign of Orestes or his successor; yet in the same paragraph names the reign of Atreus as the generation-date. Similarly Pausanias (8.5.1) retracts the synchronism of Hyllos and Orestes, and makes Hyllos' death occur in the time of the daughters of Tyndareus, i.e. of the sons of Atreus. This would follow from the synchronism of Agis and Gras if Agis were allowed a full generation. These two sets of synchronisms may be shown:

	Hyllos	Atreus
1 Orestes	Kleodaios	Agamemnon
2 Penthilos	Aristomachos	1 Orestes
3 Echelatos	Aristodemos	2 Penthilos
4 Gras	Eurysthenes	3 Echelatos
	Agis	4 Gras
5	Echestratos	5
6	Labotas	6
7	Doryssos	7
8	Agesilaos	8
9	Archelaos	9
10	Teleklos	10
11	Alkamenes	11

From the narratives of Pausanias and Diodoros therefore we have evidence of two methods of synchronising the dynasties of Mycenae and Sparta, both of which reckon 10 generations from Orestes to Alkamenes. The 390 years given by Apollodoros for this period thus allow an average of 39 years to a generation, and we may set out a model series of dates for the 407 years as follows:

1183-1177	Aigisthos for 7 years after Troy	
1176-1138	Orestes and Kheodaios	1
1137-1099	Penthilos and Aristomachos	2
1098-1060	Echelatos and Aristodemos	3
1059-1021	Gras, Eurysthenes, and Agis	4
1020- 982	Echestratos	5
981- 943	Labotas	6
942- 904	Doryssos	7
903- 865	Agesilaos	8
864- 826	Archelaos	9
825- 787	Teleklos	10
786- 777	generation of Theopompos: firsttten years.	

We may now compare this with the actual figures of Apollodoros and see what use he has made of his model:

1103-1069	Aristodemos	35 years	$77 = 39 \times 2 - 1$
1068-1027	Eurysthenes	42	
1026	Agis	1	$104 = 39 \times 2\frac{2}{3}$
1025- 989	Echestratos	37	
988- 952	Labotas	37	
951- 923	Doryssos	29	

922- 879	Agesilaos	44 years	} 104 = 39 x 2⅔
878- 819	Archelaos	60	
818- 779	Teleklos	40	} 78 = 39 x 2
778- 741	Alkamenes	38	

The 39-year basis is still quite obvious, but by the use of thirds of generations, four names in one group are made to cover a period equal to that allowed for two names in another group, thus "preserving the phenomenon" of a natural appearance, and presenting the kind of successive proportions which might be found in nature. This variety within formality is further enhanced by a sort of crossing of the 10-generation model beginning in 1176 with the model of all the Spartan generations beginning with Aristodemos' generation in 1104 and ending with Kleomenes' in 519. This last base-date shows that Apollodoros' dates assume the existence of the Chronographic Model, from which, indeed, the figure of 39 must have been derived. We may infer that Apollodoros had in mind the year 1104 for the beginning of the <u>generation</u> of Aristodemos, although he dated the Return in 1103, and that consequently the 78 years from 1104 to 1027 were intended to balance the 78 years from 818 to 741. It may further be noted that in section B of Appendix I there is shown some reason to suppose that Apollodoros gave Polydoros, Eurykrates, and Anaxandros 104 years, and 117 years to the last three kings before Kleomenes. His full series of numbers would then be (in generations) in groups of 2, 2⅔, 2⅔, 2, 2⅔, 3 - a very simple and recognisable style of apportioning the years.

The other list, attributed to Kastor, is not so naive, and permits the appearance of odd years in its chronographic groups, like, for instance, all the Athenian lists examined in Appendix III. It may be set out:

1107-1066	Eurysthenes	42 years	78 = 39 x 2
1065-1064	Agis	2	
1063-1030	Echestratos	34	
1029- 993	Labotas	37	96 = 39 x 2⅔ + 5
992- 964	Doryssos	29	
963- 934	Agesilaos	30	
933- 890	Menelaos	44	104 = 39 x 2⅔
889- 830	Archelaos	60	
829- 790	Teleklos	40	92 = 39 x 2⅔ + 1
789- 763	Alkamenes	27	
762- 738	Automedes	25	

The surplus of 6 years could of course easily be compensated in the later part of the list, which is lost. Apart from these years, the total is 39 x 9⅓, the same as the surviving portion of the Apollodoran list, although that contains 10 kings and this contains 11. The chronography of this list was therefore probably modelled on that of Apollodoros: the traditional names find another explanation.

ii. The names and numbers of generations in the lists

The preceding analysis of the regnal years attributed to the Spartan kings by Apollodoros and Kastor shows how these figures were constructed, and we must infer that the raw material of the chronographers consisted of lists of generations and events

attributed to generations. It is therefore necessary to enquire into the forms of the generation lists, and the methods of attributing events to generation dates.

We have already noticed the importance of the anchisteia in defining the Greek generation, and seen that the archaic Corinthian king list consists of two complete anchisteiai and the first generation of a third. It is obvious that, so long as the anchisteia form was remembered, there would be no difficulty in remembering the number of generations, and that, if we know the form of anchisteia present in any community, we may be able to use this as a check upon the number of generations in the king list. The evidence for Spartan social organisation is fragmentary, and, such as it is, may be extracted from the Eurypontid traditions.

. The Eurypontidai after Theopompos

The Eurypontid genealogy from Theopompos downwards appears in two versions, one in Herodotus[3] and one in the other authors,

3. 8.131

giving two male lines of descent, in each of which most of the members are said to have been kings.

In view of the Corinthian and Halikarnassian rules of inheritance, there seems to be no reason to doubt that both these lines provided kings down to the generation of Agesikles, when filial inheritance appears. But the succession of Demaretos by Leotychides II, his kinsman in the 15th degree, suggests a practically limitless circle of potential heirs, which is very difficult to believe on general grounds, and

becomes impossible when we remember that Ariston married three times, and Anaxandrides II in the same generation was allowed to be bigamous, in order that they might have sons to succeed them.

8	Theopompos	
7	Anaxandrides I	Archidamos did not reign
6	Archidamos	Zeuxidamos
5	Anaxilaos	Anaxidamos
4	Leotychides I	Archidamos
3	Hippokratides	Agesikles
2	Agesilaos did not reign	Ariston
1	Menares did not reign	Demaretos deposed c491
	Leotychides II deposed 469	

An odd feature of the relations between Leotychides II and Demaretos is that Demaretos' queen had previously been betrothed to Leotychides.[4] As she was the daughter of a Chilon (probably

4. Hdt. 6.65

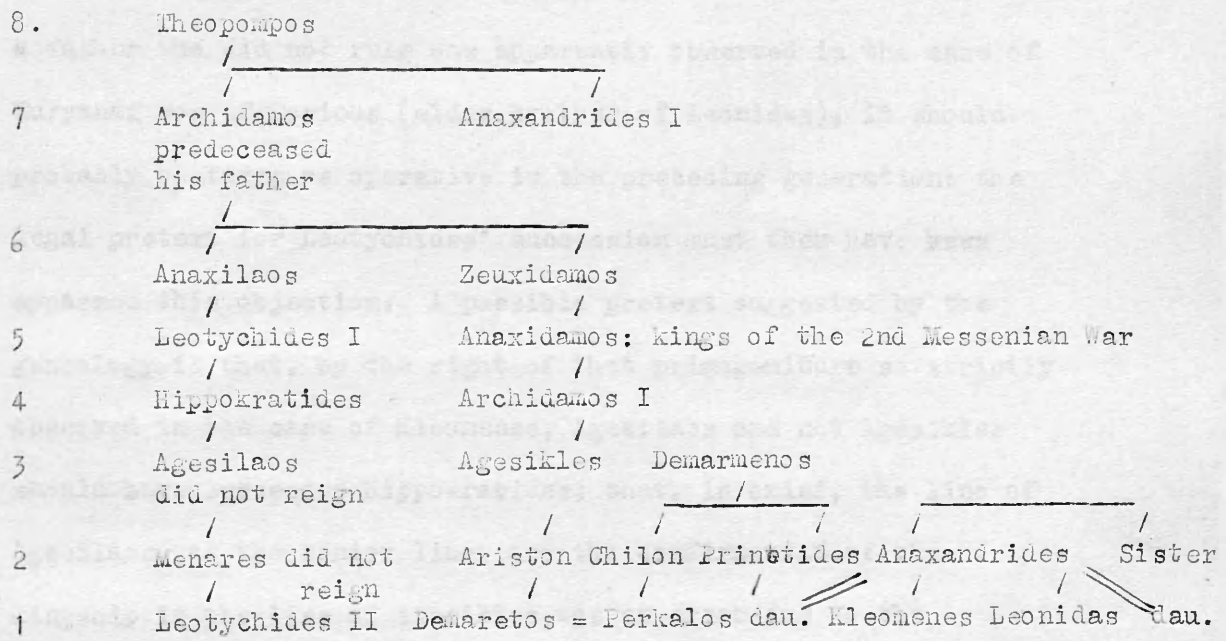
of the same family as, and perhaps identical with, the famous ephor: see chapter 5, section C,[vi] below), it is unlikely that she was the heroine of a youthful romance: rather it seems probable that Chilon had some reason for hesitating between the two men as son-in-law; and this suggestion of a dynastic marriage is made more likely by the apparent fact that Chilon's niece was the mother of Kleomenes.

It has often been suggested that Archidamos the son, and

Archidamos the grandson, of Theopompos were on person, the common ancestor of the two lines. Pausanias says the son predeceased his father; Herodotus makes the grandson a king. Herodotus believed that a Spartan could only succeed his father on the throne if he had been born while the father was king, so that[5]

5. 7.3

his account of Archidamos may be explained as apparently necessary to ~~explain~~ provide for his son's accession, that is, as a retrospective application of constitutional law. If then we suppose the two Archidamoi were one man, the pedigree appears as follows:



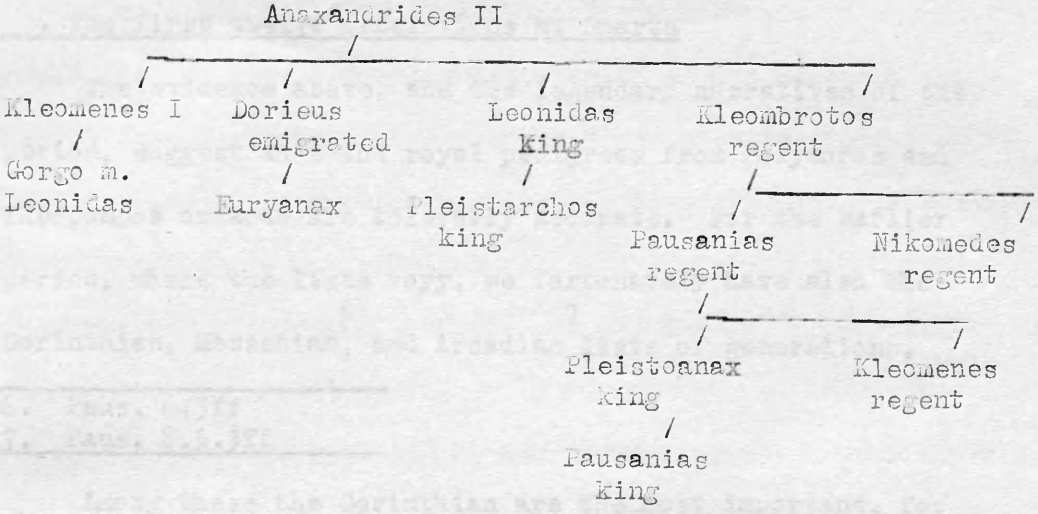
In this form of the genealogy, Agesikles is second cousin's son to Hippokratides. This suggests that in his time the rule of succession was the same as at Corinth, and that Agesikles succeeded as being the oldest male of his generation, older than Hippokratides' son Agesilaos. It would thus appear that in the lifetime of Agesikles the kingship was confirmed in his line, after the fission of the Archidamian anchisteia had occurred.

If this is correct, we should have expected that the deposition of Demaratos would be followed by the accession of some other descendant of Archidamos I and member of Demaretos' anchisteia. This does not happen; and moreover the story of Demaratos, Perkalos, and Leotychides II suggests that Chilon had some reason, long before Demaratos' deposition, for hesitating between the two men. Herodotus' stories reveal something of what may have been contemporary arguments about the two: Leotychides was not born while his father was king, and Demaratos' paternity was in doubt. Since the prohibition of accession by the son of a father who did not rule was apparently observed in the case of Euryanax son of Dorieus (elder brother of Leonidas), it should probably be taken as operative in the preceding generation: the legal pretext for Leotychides' succession must then have bypassed this objection. A possible pretext suggested by the genealogy is that, by the right of that primogeniture so strictly observed in the case of Kleomenes, Agesilaos and not Agesikles should have succeeded Hippokratides; that, in brief, the line of Agesilaos was the senior line, and the confirmation of the kingship in the line of Agesikles was an error due to the ancient and abandoned form of eldest male, instead of eldest son, inheritance. Such an argument would imply that the new law came into force after the accession of Agesikles, and possibly during his reign, since it implies that Agesikles, having succeeded under the old law, ought to have been deposed in favour of Agesilaos.

This suggests that a reorganisation of the Euryponted royal family tookpplace during the first half of the sixth century, which

is the date proposed on archaeological evidence for the "Lykourgan" constitution. The anecdote of Lykourgos' refusal of the kingship is to the point here. Lykourgos' brother had died while king, leaving a pregnant widow: she suggestedto Lykourgos that he should marry her and become king. He however waited till the birth of the child, and when it proved to be a boy, presented him to the people as their king: whence the name Charilaos. This, in the light of the Corinthian evidence, suggests that the story ascribed to Lykourgos the ending of succession by the eldest male, and the institution of filial succession. The Eurypontid genealogy dates this change to the time of Agesikles, which is not inconsistent with Herodotus' account of Lykourgos, and suits the archaeological evidence.

This change amounts to a replacement of Anchisteia by oikos inheritance, changing the old rule of eldest survivor to that of the eldest born. In the generation after Agesikles, the stories of the marital anxieties of Ariston and Anaxandrides II show the difficulty of establishing the new law, probably because the new oikoi at first consisted each of only one male member. In the following generation, no such difficulties are reported for Kleomenes, the father of an only daughter, probably because he had brothers and nephews capable of succession. The genealogy of the descendants of Anaxandrides II shows how the inheritance proceeded in the fifth century:



The son of the brother (Dorieus) who had never been king or regent is excluded from the succession, although Dorieus was older than Leonidas and Kleombrotos. Similarly, Leonidas and Gorgo may had had older sons, excluded from the succession.

Some corroborative evidence for the emergence of the oikos as the basic social organism is found in the names of the kings. The first kings to bear the same name as an ancestor are Archidamos I Eurypontid, and Eurykrates or Eurykratides Agiad, both in the generation after the second Messenian War, and the generation before Agesikles. The law of Agesikles probably therefore enforced a trend already existing towards autonomy of the oikos.

To summarise: the Eurypontid pedigree suggests that up to the time of Agesikles the eldest male within the anchisteia (which was of the Corinthian type) succeeded. It follows that the "king" lists of the earlier period, which claim to record filial descent, are no more than lists of named generations. The question is whether the number of generations accords with the evidence for the anchisteia organisation.

. The first twelve generations at Sparta

The evidence above, and the legendary narratives of the period, suggest that the royal pedigrees from Polydoros and Theopompos onwards are tolerably accurate. For the earlier period, where the lists vary, we fortunately have also the Corinthian,[6] Messenian, and Arcadian[7] lists of generations.

6. Paus. 6.3ff
7. Paus. 8.5.3ff

Among these the Corinthian are the most important, for analysis of these records according to anchisteia law shows the probability that the generation list represents two successive anchisteiai and the first generation of a third - nine generations in all, including that of the Dorian settlement. Moreover, the Marmor Parium preserves the tradition that Archias the founder of Syracuse was the 10th from Temenos. Ten Dorian generations thus bring us down to a period when there is some external evidence for dating.

Practically no other traditions than the royal names and the inheritance law are preserved for this period of Corinthian history:[8] but Pausanias notes that Megara became independent

8. 4.19.13

in the archonship of Phorbas at Athens. According to the Corintho-Attic construct, Phorbas the fifth Medontid archon should overlap Prymnis and Bacchis, the founder of the second anchisteia at Corinth when the anchisteia of Aletes disintegrated. In this case, it would appear that the moment of fission of the royal anchisteia was a moment of great governmental weakness, and the reason may be

this: as head of the royal anchisteia, a king was in a position of authority over the collective wealth of his kinsmen, quite apart from his public revenues (whatever they may have been at this period); the monarch was in this sense an economic focus. But during the youth of a new oikos, the collective wealth disintegrated together with the old anchisteia, being distributed among the new social units.

Knowledge of this danger and difficulty may be the explanation of events four generations after Bacchis, when the generation-list, uniquely, gives more than one king to the generation: Aristodemos is succeeded by his brother Agemon, then by a kinsman Alexandros, and only in the third place by his son Telestes. Telestes however was shortly assassinated, and the derivative Bacchiad anchisteiai solved the problem of collective organisation by constituting themselves an endogamous corporation in imitation of the old anchisteia.

In the Marmor Parium Archias of Corinth is called a Temenid. The Temenid phratry[9] is otherwise only known at Argos, where it provided the kings up to the time of Meltas.[10] But it may have existed at Corinth, and been the phratry to which the Bacchiadai belonged: we certainly cannot prove a negative, and archaic Corinth probably possessed the three Dorian tribes, and so probably possessed some Dorian phratries.[11] The stories of the assistance given to Aletes by the sons of Temenos suggest a

9 Vollgraff, Bull de Corr Hell 33(1909)

10. Paus. 2.19.2 See Appendix II

11. for the contrary view, see Jacoby's Marmor Parium

close association between the two groups. The existence of such a phratry at both Corinth and Argos might explain why Pollis of Syracuse is called an Argive: the term might stand for "Temenid".[12]

12. for another view, see Dunbabin, Western Greeks, p 93f.

It seems probable then that the Corinthian generation list represents, however meagrely, a true aspect of Corinthian history for the space of the first nine Dorian generations. If we use it to measure the generation lists of the Spartan Agiadai, we have:

	CORINTH	SPARTA
x	1. Aletes: 4th from Herakles	Aristodemos: 4th from Herakles
I	2. Ixion	Eurysthenes
I	3. Agelas	Agis
I	4. Prymnis	Echestratos: Lykourgos according to the Spartans quoted by Herodotus
II	5. Bacchis	Labotas
II	6. Agelas	Doryssos
II	7. Eudemos	Agesilaos[13]: Lykourgos according to Pausanias, etc.
II	8. Aristodemos Agemon Alexandros	Menelaos (or Archelaos)
III	9. Telestes	Archelaos (or Teleklos)
III	10. Archias	Teleklos (or Alkamenes)
		11. Alkamenes (or Polydoros)
		12. Automedes (or Eurykrates)
		13. Polydoros

13. Note that king Agesilaos is homonym of the prince whose father was succeeded by Agesikles, the probable true contemporary of the Eunomia. King Agesilaos may therefore be a fiction, but the generation (however named) should be retained: see below.

This comparative table suggests the following comments:

(a) the Spartan ~~generation~~ tradition of Lykourgos reported by Herodotus[14] places the hero in the fourth generation of the first

14. 1.65

anchisteia, that is, in a generation whose members would be particularly concerned with preparing for the fission which would take place in the next generation. This Lykourgos may in part represent customs or laws supposed to have been instituted at this time.

(b) the fourth generations of the second and third anchisteiai are the points where variants occur in the lists. The vulgate tradition omits each of these fourth generations, and places Lykourgos in the time of the third - and so the last - generation of the second anchisteia. Now we know that this Lykourgos is an invention, so the inference is that the laws or customs of fission associated with his name have here replaced whatever traditions were represented by the name of Menelaos. Similarly, the "younger" Lykourgos (the lawgiver) is placed by Apollodoros [illegible] in the generation of Alkamenes, the third - and last-generation of the third anchisteia, so that here his presence covers the absence of Automedes. We have seen reason to believe that the historical "Lykourgos" was active at the time of the fission of the fourth anchisteia, when the kingship passed to Agesikles, so that it would appear that the various retrodatings consistently maintained his connection with events of the same type. Since the fission of an anchisteia necessarily involved the division of its property, it seems that here we have the roots of the persistent tradition that Lykourgos carried through a

redivision of the land.

The association of the places of the omitted kings with dates for Lykourgos, taken alone, suggests very strongly that the longer list is pre-Lykourgan and nearer to historical truth. But the decisive argument in favour of the longer list from a study of social organisation is that it is incredible that the Spartans should have begun with a four-generation anchisteia, introduced a three-generation form, reverted to a four-generation form after Theopompos, and proceeded to oikos inheritance in the time of Agesikles: a peasant people is not so wildly unstable. (c) the social considerations therefore point to a preference for the longer generation list, and in the first two anchisteiai historical considerations are lacking. These arise in the third ~~xxxxxxxxx~~ anchisteia, where the short list makes Polydoros one generation junior to Archias, and the long list makes him two generations later. These datings are those of Syracuse (Archias) and the first Messenian War (Polydoros), which are synchronised by Eusebius, and probably by other authorities too. However, another and later date for Polydoros is implied in Pausanias' statement that Polydoros was contemporary with the colonies at Kroton and Lokroi.[15] Kroton is dated to 710 by

15. 3.3.1

Dionysius and to 706 by Eusebius, and Lokroi to 670 by Eusebius (see below, chapter 7). In her foundation legend, Lokroi claimed to have been founded at the end of the first Messenian War, and Taras shared the same legend, with minor variations.[16] This legend

16. Dunbabin pp 29f (Taras), 35ff (Lokroi)

alleges that while their husbands were away for twenty years in Messenia, the Lokrian or Spartan women consorted with their social inferiors and produced a generation of half-castes who were sent away to the colonies. The prototype of this legend appears in Herodotus, where it is told of the Skyths who ravaged Asia in the seventh century,[17] and this is clearly its formal source, for no Greek in his senses would imagine without some such stimulus that a Spartan army (or its Lokrian allies) could be kept without home leave for twenty years.

The formal origin does not however explain the application of the story to Sparta and Lokris: this must rest on something odd in the relations of colony and metropolis. Of Lokroi we know little, except that the colonists claimed descent from, and accorded respect to the native representatives of, the Hundred Oikoi (Oikiai) of old Lokris; the Tarentine record of cults and other relations with Sparta show that few colonies were so closely connected with their metropoleis: only the Athenian cleruchies are comparable.[18] But beyond these formal ties,

17. Hdt. 4.1ff
18. Dunbabin p.92

the association of colony and metropolis often went much deeper; the institutions of a polis were not only the various organs of legislation, judicature, and executive, but also the tribe and its subdivisions, and the family organisation. In historical times, there are instances of colonists only being accepted if they left a son behind in the metropolis to continue their oikos, and in Sparta in the late sixth century Dorieus left behind his son Euryanax. The Lokrian and Spartan stories of half-castes

suggest that this parallelism of recognisably identifiable stocks was not found between Lokris and Lokroi, or Sparta and Taras. There may have been more than one reason for this: the colony may not have been organised to secure it in the first place, or the institutions of either colony or metropolis may have been changed after the colony was founded. The traditions of Zaleukos at Lokroi in the first generation of the colony, the constitutional changes of Lykourgos at Sparta, and the tradition -denied by Aristotle - that Zaleukos and Lykourgos were contemporary, show that such changes did take place, in Lokroi in the colony, and at Sparta in the metropolis. The story cannot have arisen in the first place before "the Skyths returned to Europe", nor have been applied to Taras before the Lykourgan reforms at Sparta: the Skyths irrupted in 613, so their 28-years empire ends in 586 (see below chapter 5): the story is thus of the sixth century or later, and has no part in the true foundation legends of these colonies.

If this highly coloured romance had not been preserved in our sources, and we had only the statement that the first Messenian War belonged to the same period as Kroton and Lokroi, we should conclude that the war happened between these two dates. In so far as the colony dates are archaeologically supported, this conclusion should stand.

The dates given for the first Messenian War in the narratives and elsewhere fall into four groups (1) before Lokroi (traditionally in 670), (2) before Kroton (traditionally 710-06), (3) before any Italian colony (for Sybaris was dated 720, and Kastor's tradition ends the war in that year), (4) the capture of Messenia occurred

before the foundation of Syracuse (Apollodoros, Eusebius), or the whole war was over by then (Deinarchos, Isokrates) and so contemporary with the institution of the ephorate attributed by some to Lykourgos; or finally, the subjection of Messenia was contemporary with the regency of Lykourgos. This series shows persistent retrodating, reaching its maximum in the fourth century when Messenia was restored and belief inthe criminality of Sparta most easily enhanced. As in all such series (e.g. Lykourgos himself) the latest possible date is to be preferred, so that the terminus ante is the foundation of Lokroi (see further below chapter 6). This is the later date for Polydoros, and so the longer Spartan genealogy is to be preferred also on historical grounds.

. Archaic monarchies of the Peloponnese (except Argos)

The chronographers only treated in detail the Corinthian and Spartan monarchies: those of Messenia and Arcadia are also listed by Pausanias, and from him also we have a list of Aigeid generations in Sparta.[19] On the basis of the preceding argument about the Corinthian and Agiad names, we may examine the Peloponnesian lists of named generations en bloc, and thus gain some notion of the traditional material from which the chronographers selected their lists for treatment.

The following table shows the Corinthian and Agiad dynasties already listed, and placed the other names according to the traditional synchronisms, thus:

(a) Kresphontes of Messenia is the brother of Aristodemos of Sparta, but Phintas is contemporary with Eumelos of Corinth and

19. 3.15.8, 4.7.8

	CORINTH	MESSENIA	ARCADIA	Agiadai	Eurypontidai	Aigeidai
1	Aletes	Kresphontes	Hippothoos	Aristodemos		Theras
2	Ixion		Aipytos	Eurysthenes	Prokles	
I						
3	Agelas		Kypselos	Agis		
4	Prymnis		Holaias	Echestratos		
5	Bacchis	Aipytos	Boukolion	Labotas	(Soos)	Oiolykos
6	Agelas	Glaukos	Phialos	Doryssos	Eurypon	
II						
7	Eudemos	Isthmios	Simos	Agesilaos	Prytanis	
8	Aristo-demos	Dotadas	Pompos	(Menelaos)	Eunomos	
9	Telestes	Sybotas	Aiginetes	Archelaos	(Polydektes)	Aigeus
10	(Archias)	Phintas	Polymestor	Teleklos	Charilaos	Hyraeus
III						
11		Antiochos	Aichmis	Alkamenes	Nikandros	Laias
12		Euphaes	Aristo-krates I	(Automedes)	Theopompos	Euryleon
13			Hiketas	Polydoros	Anaxandrides I	
14			Aristo-krates II	Eurykrates	Anaxilaos Zeuxidamos	
IV						
15	Kypselos		Eristheneia	Anaxandros	Leotychides I Anaxidamos	
16	Periandros	married	Melissa	Eurykratides	Hippokratides Archidamos I	
17	Psammetichos			Leon	Agesikles	
18				Anaxandrides II	Ariston	
19				Kleomenes I Leonidas	Demaratos Leotychides II	

Teleklos of Sparta, Antiochos with Alkamenes and Theopompos, and Euphaes with the first part of the first Messenian War. Consequently there is somewhere a gap of three generations, and in the table this is placed between Kresphontes and Aipytos, where the traditions

speak of an interregnum. They also say that Aipytos was the son of Kresphontes: the arrangement in the table suggests merely that the Aipytid anchisteia succeeded that of Kresphontes, and of course in historical times the Messenians would endeavour to establish above all that they had a good Dorian title to their land.

(b) In the Arcadian traditions Kypselos of Arcadia is the grandfather of Aipytos of Messenia; Polymestor is contemporary with Charilaos, and Aristokrates I and II with the two Messenian Wars. The granddaughter of Aristokrates II married Periandros of Corinth, and this marriage places Kypselos of Corinth five complete generations and the remaining years of Telestes' generation later than the end of the monarchy. Thisrreckoning seems to appear in Strabo's figure of 200 years of Bacchiad oligarchy, for 200 = 39 x 5 + 5. The short Spartan list would make Archias and Alkamenes contemporary, thus placing Aristokrates II two generations after Archias, and Kypselos of Corinth in the next generation: then the gap between Telestes and Kypselos is only three generations. This reckoning seems to be given the least possible number of years in Diodoros' (Apollodoros') statement that the Bacchiad oligarchy lasted 90 years, for 90 = 36 x 2½. Probably this tradition of 90 years should be associated with the traditions that Aletes settled in Corinth some 30 years after the Return, which postdates the Corinthian dynasty by nearly a generation, i.e. Telestes would come down into generation 10, leaving only two completely empty generations before Kypselos.

This arrangement of the Arcadian dynasty places the Return

not in the generation of Kypselos as in the traditions, but in that of Hippothoos, the founder of a new dynasty. The synchronism of Aipytos son of Hippothoos with Orestes would place Agorios of Elis, great-grandson of Orestes, and the Aitolian settlement in Elis, in the fourth or fifth generation of this table, and so contemporary with Lykourgos the guardian of Labotas. Some such tradition of the Elean settlement may have been associated with the story of Lykourgos and the Olympic truce.

(c) The placing of the Eurypontidai of Sparta depends in the first instance on the names in generation 19. It agrees with the names mentioned for the second Messenian War (Anaxandros, Leotychides II, Anaxidamos), and with the seniority of Theopompos in the first war: Charilaos then comes at the right place to secure his synchronism with Polymestor of Arcadia. Before that, we have variant lists, as follows:

Herodotus	Pausanias etc.	Simonides & Apollodoros
1. Prokles	1 Prokles	1. Prokles
	5 Soos	
6 Eurypon	6 Eurypon	6. <Eurypon>
7. Prytanis	7 Prytanis	7 Prytanis
9. Polydektes	8 Eunomos	8. Eunomos: Lykourgos
8. Eunomos	9 Polydektes: Lykourgos	
10. Charilaos	10.Charilaos	10. Charilaos

The Herodotean version omits all names of the first anchisteia after Prokles, and allows only three names to the second: it does not associate the genealogy with the legend of Lykourgos.

Simonides and Apollodoros appear, so far as their fragmentary texts

are interpretable, to have Prokles in the first anchisteia, Eurypon and Prytanis in the second, and Lykourgos in the first generation of the third. Pausanias dates Lykourgos to the time of Agesilaos, the last generation (in the short genealogy) of the second anchisteia, while Plutarch, using the same Eurypontid genealogy, places Lykourgos in the first generation of the third anchisteia: his names place Prokles in the first anchisteia and give a complete set of 4 named generations for the second anchisteia. As a whole, the Eurypontid names before generation 10 are extremely unconvincing: Eunomos in particular is at earliest a sixth-century invention, and Polydektes appears later than the time of Simonides: it is not beyond the bounds of possibility that Eunomos son of Prytanis was an invention of Simonides himself. The irreducible elements of the early Eurypontid generations thus appear to be Prokles for the first anchisteia, [illegible], and Theopompos with his father Nikandros and grandfather Charilaos together with the eponym Eurypon, for the third.

(d) The Aigeid genealogy is equally problematic. Theras is brother-in-law to Aristodemos, and Euryleon is contemporary with Theopompos and the early years of Polydoros, and fourth descendant of Aigeus. Oiolykos and Aigeus were worshipped as heroes by their descendants, and their names are placed in the table in accordance with this hint that they were worshipped as literal *oikistai*, founders of *oikoi*. If this is correct, it is suggestive that the continuous series of named generations begins in the same period as that of the Eurypontidai; that in most accounts Lykourgos is a Eurypontid and Oiolykos is an Aigeid;

that Lykourgos was uncle and guardian of Charilaos, and Theras uncle and guardian of the twins.

The arrangement of the dynasties in the table is thus tolerably satisfactory, suggesting that - outside such possible poetic contributions as Eunomos son of Prytanis - the named generations provided anchisteia records, usually naming each generation but sometimes only the anchisteia itself. On these assumptions, there is no question of simple error in each list, but the possibilities are (1) named generations, (2) named anchisteiai merely, (3) insertions and additions of poetic origin, (4) retrospective reshaping of the anchisteiai.

The question therefore remains why, by the time of Herodotus, the shorter Agiad list giving three-generation anchisteiai after Lykourgos the guardian of Labotas had already come into existence. The inference is that the "Lykourgan" reforms not only established the oikos as the unit of society, but also reduced the size of the anchisteia by one generation: both are measures designed to limit the circle of potential heirs and increase individual responsibility for the maintenance of the household. This recasting of the anchisteiai was continued by Eratosthenes and later chronographers, who only allowed 1 or 2 years to Agis, and thereby almost reduced the first anchisteia to three generations.

iii. Attribution of events to generations

We must now briefly consider the effect upon the historical narratives of the shortening of the Agiad genealogy. The table below sets out the main events according to their generation dates

Generation	Events and evidence for absolute dating
1.	The "Return": continuous records in Corinth, Arcadia, and for the Spartan Agiads, (Archaeological date for the foundation of Sparta, very approximately 950 B.C.)
5.	Foundation of the Bacchiadai at Corinth. Continuous records in Messenia.
6.	In Messenia, Rhodos the sanctuary of Machaon, founded at Gereneia
7.	In Messenia, sanctuary of other Asklepiadai founded at Pharai
8.	In Messenia, an additional port built at Mothone In Arcadia, the Aiginetan traders reach Trapezous
9.	In Corinth, end of the monarchy. In Sparta, conquest of Aigys. Beginning of continuous Aigeid names.
10.	In Messenia, Rhintas employs Eumelos to write a choral song for Delos. In Arcadia, Polymestor defeats a Spartan attack. In Lakonia, Teleklos captures Amyklai, Pharis, and Geronthrai. (Corinth sends Archias to Syracuse.) Continuous names of the Eurypontidai begin.
11.	Sparta reaches the Lakonian coast, and sends an embassy to Crete. Spartan war with Argos
12.	Beginning of the first Messenian war.
13.	End of the first Messenian war: Lokroi founded
14.	The generation of peace
15.	The second Messenian war: the first tyrannies.
16.	Periandros of Corinth
17.	Changes in social organisation at Sparta affect the oikos and anchisteia. Unsuccessful wars of Sparta against Tegea
18.	Foundation of the Peloponnesian League: Persian conquest of Lydia (c546)
19.	The Persian wars at the end of the generation.

in the narratives, and the rare evidence for absolute dates.

(a) Evidence, of various kinds, for absolute dates appears in the following generations:

1: The very approximate archaeological dating for the foundation of Dorian Sparta about 950 B.C.

11: The foundation of Syracuse sometime in the half-century 750-700, various places in these years being given or suggested by the traditions and the archaeology (see below, chapter 6)

12: Traditional foundation of Kroton in 710-06, about the time of the first Messenian war

13: Traditional foundation of Lokroi in 670, after the end of the first Messenian War

15: Aristomenes of the second Messenian war said, apparently by Diagorid family tradition, to be contemporary with Ardys of Lydia, who acceded about 652-44 and reigned for a considerable time.

18: Contemporary with the Persian conquest of Lydia, c 546

19: The Persian Wars.

The last nine generations cover the period c730-480, but the last two generations are exceptionally long (c546-480), and some allowance should be made for this. With such an allowance, a generation during this period seems roughly to be equivalent to a quarter-century. On that reckoning, generation 1 would be dated c975, which is not outside the archaeological evidence.

Tracing the Spartan Agiad line back through Herakles to its first founder Perseus would give us 7 more generations, and on the same reckoning would date Perseus about 1150 B.C. Perseus as the founder of Tarsons possesses an archaeological equivalent in the twelfth-century "squatters' level" at Tarsos, where the

20

20. AJA ~~(illegible)~~ 41 (1937) 262 ff. Cf. p. 125 below

Argive clay of the pots shows that the refugees came from the Argolid.

The male descent line from Perseus to Kleomenes thus seems to contain generations with a constant average throughout its length, and so provides an invaluable datum for the study of the period.

(b) Historical problems arising from the attribution of events are (i) the great importance of Messenia in generations 6-12 (850-700 B.C.), in association, it would appear, with Arcadia (Aipytos), Corinth (Isthmios, Glaukos), Rhodes (Asklepiadai) and the old Delian League (Phintas and Eumelos); (ii) the beginning of Spartan history in generations 9-10 (775-50) and not earlier, when Messenia is already at the height of her glory; (iii) the relative dating of Syracuse and the first Messenian War already mentioned. Particularly important is the tradition that Dotadas of Messenia (generation of 800) built an extra port at Methone, although Messenia already had others, suggesting that Messenia at this date was already interested in east-west trade. The archaeology of Messenia is almost non-existent, but these traditions suggest that valuable chronological material for the Geometric period awaits the excavators of Gereneia, Pharai, and Methone.

(c) Another historical problem is the relative dating of the second Messenian war and the Corinthian tyranny. The narrative of Pausanias makes Aristokrates II die at the end of the second war, which should mean that he belongs to generation 14/15 and Kypselos to generation 15/16. This inference does not stand alone:

there is also the exceptionally early year-date for the war,[21] its containment within the reign of Anaxandros,[22] and the replacement of Strabo's Pisatan allies of Messenia by the Eleans,[23] which last is confirmed by the convincing detail of the seer of Aristomenes, anx Iamid kinsman of the Iamidai of Olympia.[24]

21. see Appendix I
22. Paus. 4.22.5ff
23. Paus. 4.15.4
24. Paus. 4.16.1

Pausanias thus represents a definite historiographic view, which saw the Messenian war as preceding the rise of the tyrants. His source achieved this result by retrodating the war to the first half of the seventh century, but Pausanias himself preserves (apparently from Diagorid family tradition),[25] a synchronism of Aristomenes with Ardys of Lydia who acceded 652 or later, and Phraortes of Media (c 647-625: see below chapter 5 sectionD). The war should therefore be dated to the second half of the century, and if the tyrannies are later than the war, as

25 Paus. 4.24.2f

Pausanias maintains, then their rise belongs to the last part of the century. The Corinthian dates are crucial here: the vulgate authority is Sosikrates, who dated the death of Periandros 39 years before the fall of Kroisos.[26] This 39 years is merely a

26. ap. Diog. Laert. 1.95

generation, and valueless for absolute dating: the Herodotean narrative suggests a date about 560, and source known to Plutarch made Aesop come from Kroisos to Periandros,[27] as though Periandros

27 Sept.Sap. 150A

lived on after the accession of Kroisos. Kypselos' accession is dated in the vulgate to 657/6/5 B.C., which is 36 x 2 years before Periandros' death in 585. The vulgate (i.e. Sosikrates) thus seems to date the Corinthian dynasty many years too early throughout, and the combined evidence of Pausanias and Herodotus is decisive.

(d) Finally, it is noteworthy that the anchisteia analysis fully confirms the Herodotean and archaeological date of "Lykourgos".

B. The Argive and Elean Traditions

No complete list of the Dorian kings of Argos survives, nor have we any evidence that the chronographers were interested in Argive history, except for the name of Pheidon. The examination of this king's dates however serves to check and support our conclusions from the other Peloponnesian lists, and adds to the stock of raw material which we must suppose the chronographers to have used.[1a]

1a. See now also A. Andrewes in CQ 43 (1949) 44 70ff.

In Appendix II it is shown that the genealogies of Pheidon and the Macedonian kings are valueless, except for the hint they contain that the Argive anchisteia was believed to be of the same type as the Corinthian and Spartan. The examination of the generation and year-dates for Pheidon shows that he is placed in the last generation of the second, third, and fourth Agiad anchisteiai by Theopompos, Ephoros, and Herodotus respectively. This is a series of datings similar to those for Lykourgos and the first Messenian War, and the same principle should be applied, namely that the latest date is to be preferred. This is the Herodotean date, and the Herodotean Pheidon is about contemporary with the Herodotean Lykourgos. The association and contrast of Pheidon and Lykourgos is a constant feature of the traditions: Pheidon "invents" money: Lykourgos forbids it; Lykourgos establishes the Olympic truce: Pheidon outrages it; Lykourgos protects the legitimate kingship: Pheidon is one of the first tyrants; both belong to the eleventh Herakleid generation; both are made contemporaries of Alkamenes. Even in the retrodated and recast traditions therefore, the contemporaneity and conflict of the

two men ~~xxxxxxxx~~ are emphasized, and this would seem to be most naturally derived from the form of the tradition on which Herodotus draws.

The proposition is, therefore, that the dates and traditions are not Argive in origin (except for the Herodotean), but form part of a general ~~xx~~ Peloponnesian and Attic view of archaic Hellenic history, largely dependent on Sparta and elaborated in the fourth century. Therefore, if the reasons for the historiographic view can be discovered, they should serve to check and illuminate the Spartan traditions.

i. The activities attributed to Pheidon ~). economic.

The Herodotean tradition of Pheidon says merely that he established measures ~~xx~~ for the Peloponnesians, and outraged the Olympic truce.[28] To this Ephoros adds the establishment of weights, and the coin-standard in silver, and that money was first minted in Aigina for him.[29]

28. Hdt. 6.127
29. Ephoros Frr. 115 and 176 (Jac)

Ephoros was interested in attributing important inventions to their appropriate authors, so it is not necessary to take too seriously his statement that Pheidon was the first to have money minted. On the other hand, for Ephoros to have been able to say this, the neame of Pheidon must previously have been associated with money, as well as with weights and measures. This in fact is the whole burden of the Pheidonian tradition and the basis of his continual comparison with Lykourgos: Pheidon is the protagonist and representative of Greek market economy, which used money as its technical means for meeting the problem

of commensuration of values.

Greek coinages attributed to the seventh century are said to be generally fractions of local or borrowed bullion weights, and to be irregular. About the beginning of the sixth century a new phenomenon appears in the monies of Sicily: these have a standard based on no customary weight of bullion, but on an abstraction: a weight which could easily be commeasured with other monies already circulating.[30] The Attic coinage generally dated to the second quarter of the sixth century is an issue of outstanding regularity. The variable ratio of values between commodities and

30. Dunbabin 246. This coinage comes from Himera, and (at a slightly reduced standard) from Zankle and Naxos. It has been supposed that Zankle and Naxos bought their bullion from Himera, and the difference in standard represents Himeraian profits on the transaction. If so, we see that coins at this time were still simply fractions of the commodity of bullion.

money may, at least theoretically, be handled in two ways: for example, if the price of corn goes up, fewer than 100 drachmai may be minted from a mina of silver, so that a drachma still buys the same weight of corn as before; or the drachmai may be regular, and more than a drachma be paid for the same weight of corn. The second is the principle applied, necessarily, in all regular issues, and there needs to be no fixed correlation between the weights and measures of money and of other commodities, the establishment of the ratio of value being left to the market. Irregular issues are a different matter: they may be evidence either of technical incompetence in the mint, or deliberate variation to maintain a nominal fixed price. Pheidon is said to have "established measures for the Peloponnesians" by Herodotus, and to have

instituted money and established weights and measures by Ephoros: and the Aiginetan issue generally associated with his name is irregular. There is then some reason to argue that his activity may have been concerned with devices of nominal price-fixing, father than the establishment of a regular issue: in other words, his work would mark a stage in the development from barter to money economy, and the suggestion is that Argos under Pheidon was the first capital of a confederacy (as distinct from a single community) to take this step. The final stage of freeing money from the older concepts of barter and fixed prices would then be due to the Athenians, rather later than the Herodotean Pheidon.

β. political

The relations of Pheidon to Aigina, Corinth, Arcadia, Sparta and Elis are all extremely problematic. Aigina, as a colony of Epidauros, itself a Dorian colony from Argos, seems to have been a member of the Argive league (the amphiktiony of Apollo Pythaeus) until the Argive war of Kleomenes (see below, chapter 5, section C). She would thus be, formally, a subject ally of Argos, eventhough economically she may have been the senior partner.

In the case of the remaining states with which Pheidon had relations, the interpretation of the traditions and chronography is a matter of great difficulty, especially if we accept the principle of preferring the latest date for Pheidon. The reasons for doing this, as we have seen, are, first, that Pheidon's datings are consistent in placing him in the last generation of an anchisteia and making him nearly contemporary with Lykourgos, and we know from archaeological evidence that the latest date for Lykourgos is to

be preferred: if we abandon this principle for Pheidon we deny the most consistent part of his tradition. In the second place, the evidence for Greek coinage shows that only the latest of the traditional dates can be chosen. This does not exclude, of course, possibility that all the traditional dates are wrong, but the study of the evidence has not yet progressed so far as to insist on the abandonment of the tradition.

1. Argos, Sparta, and Arcadia

The known and acceptable traditions of the relations between Argos and Sparta in the archaic period comprise (1) the expulsion of the Asinaioi by Eratos of Argos in the time of Nikandros of Sparta; (2) the expulsion of the Naupliatai by Demokratides of Argos during the second Messenian War; and (3) the possession of the Thyreatis by Argos from the battle of Hysiai to the Spartan campaign in the year of the fall of Sardis. Only the last is given year-dates in our sources; the year of the fall of Sardis is about 546 B.C. and needs no chronographic discussion. Pausanias (2.24.8) dates the battle of Hysiai to the archonship of Peisistratos the elder, 669 B.C. This is probably a chronographic date, being either 480 plus 27 x 7, or (which is perhaps more likely) intended for 668, 108 years after 776 (instead of the 108th year), i.e. the year of the Gymnopaidia. We can infer very little from this tradition, except that it may have mentioned Argive history in connection with Peisistratos the tyrant's marriage to Timonassa of Argos, 108 years later, in 560 B.C. (See below, Chapter V Eii). There is no reason, on chronographic grounds, to change the date to any significant extent, and so it should be taken as some years later: perhaps about 660 B.C. as a

rough approximation.

The historiography of the date is however very obscure. If the source belongs to the early fourth or late fifth century, and shares the historiographic views of the author of the western colony list (see chapter 6), the battle of Hysiai will fall about the end of the first Messenian war, whereas in Pausanias' view it falls at the end of the second. On the whole, perhaps an association with the end of the first war is to be preferred, for there is a certain amount of evidence that the first war was more in the nature of an international struggle than the second: the beginning of the first war, in the historiography of the author of the western colony list, is associated with the Rhodian foundation of Gela, and Rhodes was an ancient associate of Messenian; during the war, Rhegion accepted Messenian refugees. To this same period also there belongs the war of Corinth and Korkyra dated to about 664 for Thucydides.[31] There is thus a

31. His figure of 260 years before 404 might conceivably be taken as (39 x 2/3)x 10, but Thucydides' western chronography does not use long generations, and it is more probable that he is using a round number for 27 x 9 2/3 = 261 years. If he is using a long generation, the generation count would place this war in the time of Periandros, when there was a war between Corinth and Korkyra; and no doubt some historians will prefer this interpretation. But the general Thucydidean view of western history is against it.

general impression that the first Messenian war was a part of a much larger struggle against Sparto-Corinthian economic dominance; inside the Argolid, the struggle takes the form of a war between Argos and Asine, and the battle of Hysiai finds a probable context after the expulsion of the Asinaioi, and during Spartan relaxation of effort after the Messenian victory. The battle would then be the same as that nameless fight with Argos

placed by Pausanias in the old age of Theopompos, and so presumably it was lost by Polydoros some time before his assassination.

The generation between the Messenian wars is without events in Spartan history, and so also is the generation after the second war, unless the struggle with Arcadia began then. This struggle was apparently most important in the following generation, that of Leon, Agesikles, and Lykourgos, and in it we may have the explanation of a remarkable fact: although the traditions continually counterpose Lykourgos and Pheidon, there is no case where Pheidon appears in a war against Sparta - not even in Pausanias, who makes Pheidon contemporary with Alkamenes, and says that Alkamenes fought an Argive army at Helos. If Pheidon belongs to the period of Sparta's Arcadian wars, Tegea may have served in Pheidon's strategy to contain the Spartan armies, and so this curious feature of the traditions would be explained.

One Arcadian campaign of Sparta is dated, again by Pausanias, who reports that in the archonship of Miltiades (659 B.C.) the Spartans occupied Phigaleia for a short time. This also is a chronographic date, being 39 x 5 years before Kimon's akme in 464, or 39 x 4⅓ years before the victory of his father Miltiades at Marathon in 490. This date is therefore probably much too high: if we take 25 years for a generation, allow 9 years for the third, and use Marathon as a base-date (so as not to reach an extremely low date for Phigaleia by reckoning 464 + 125 = 589) we have a very approximate indication of a date about 599 B.C. The relative dating of Pausanias for Phigaleia after the second Messenian war is thus maintained.

2. Corinth and Elis: (a) Pheidon in Ephoros

Ephoros made Pheidon the tenth Temenid, and Pausanias' date of 748 for Pheidon's agonothesia expresses the same tradition; in this group also belongs the story that Aktaion's father fled from Pheidon to Corinth, and after Aktaion's death Archias founded Syracuse. As the tenth Temenid, Pheidon is here contemporary with Alkamenes of Sparta (assuming the short Spartan list), that is, he is placed in the last generation of the third anchisteia (and so, hypothetically, 39 x 4 years before a possible Herodotean date equivalent to 592 B.C.). The year 748 is 514 + 39 x 6, and the base-date 514 suggests an Athenian chronography.

Pausanias asserts that Pheidon was called in to Olympia by the Pisatai, who themselves seized the agonothesia in 644 B.C. This is 514 − 39 x 3⅓, so that Pausanias would seem to have a single source for his two anolympiad dates.

(b) Dates of the Pisatan Olympiads

The other tradition of the Pisatan Olympiads asserts that Pantaleon of Pisa established his tyranny in 672, and soon thereafter began to administer the Olympic Games; this office continued in his family up to and including the Olympiad of 572. This tradition also makes Pantaleon, and not the Iamidai, allies of Aristomenes in the second Messenian war. It is a remarkable fact that the single Olympiad of the Pausanian tradition is in 644, which may be taken as 490 + 27 x 5⅔ + 1, while the year of Pantaleon's revolt in the tradition of a series of Pisatan Olympiads is 464 + 39 x 5⅓ (490 is the akme of Miltiades III, 464 that of his son Kimon). The conclusion seems inescapable that the single Pisatan Olympiad in

644 = 514 + 39 x 3⅓ was the first form of the tradition; that this was then calculated as 644 = 490 + 27 x 5⅔ + 1, and the higher date of 672 = 464 + 39 x 5⅓ was a deliberate retrodating. The purpose of such retrodating was, perhaps, to provide Pisatan instead of Elean allies for Aristomenes, and thus remove the stigma of hostility to Sparta from the Iamidai, for whom Pindar provided a pure Spartan ancestry in his sixth Olympian ode.

(c) Olympic historiography

It is a matter of some interest to examine the various traditions of Olympic historiography, in an attempt to decide the purpose and aim of the tradition of the series of Pisatan Olympiads. The base date 514 is common to the Ephoran Pheidon and the single Pisatan olympiad, and by the time of Ephoros there would seem to be no longer any reason for the Iamidai to deny that they had once assisted Messenia. Yet the chronography of the serial Pisatan Olympiads is derived from the tradition seen in the Ephoran date of Pheidon, which suggests that some archaising chronographer of the Hellenistic period has put a date to traditions which were formulated in the period 472 to 369 B.C.

In the first place, we may note that the serial tradition has a very precise historiographic view: the period from Pantaleon's revolt in 672 to the last Pisatan Olympiad beginning in 572 is 104 years (672-569 = 39 x 2⅔ generations), about the longest time that could be allowed for Pantaleon and his two sons. In this account therefore, 104 years (776-673) of Elean Olympiads are followed by 104 years of Pisa: another 104 years end in 465, and the next period begins in 464 B.C. The placing of the first Pisatan Olympiad in 668 makes the first Elean period 108 years:

2(27 x 4) years later is 452 B.C. The Olympiad of this year was probably the one which saw the dedication of the new temple, for the akroteria were bought from the Spartan spoils at Tanagra in 457: the tithe would probably be paid at the festival of 456 and the temple completed and ready for dedication in 452. The first Olympiad in 776 is thus 27 x 12 years before this dedication, or 39 x 8 + 12 years: that is to say, the reckoning from 452 gives complete 27-year generations, and that from 464 gives complete 39-year generations. The two base-dates are historically linked by the Messenain Revolt, which began in 464 and ended in 455, so that the Olympiad of 452 would be the occasion of Spartan offerings on this victory also. Since the Olympic era of 776 B.C. seems to have been established by Hippias of Elis, we may suppose that he found the year on the basis of some such calculation as this. Moreover, since 672 = 464 + 39 x 5⅓, it would appear that the author of the Pisatan olympiads used the chronographic framework already employed by Hippias in fixing the Olympic era.

Hippias' work only survives in the list of Olympic victors, and his historiography has to be inferred from it. The cities of the victors suggest the following periodisation:

I. Olympiads 1-12: 776-32 B.C. Victors come from Elis, Achaia, and Messenia, i.e. the festival is local only. Oxythemis of Korone in 732 comes from a town later reckoned Messenian: Hippias must have supposed either that it was not incorporated in Messenia, or that it was left free by Sparta. The last Messenian victor appears in 736, and the first Spartan in 716, so that Hippias presumably dated the first Messenian war to 736-717: Korone thus appears as an independent state in the fifth year

of the war, perhaps after the Messenian withdrawal to Ithome, and before the Spartan organisation of the conquered territory.

II. Olympiads 13-16: 728-16 B.C. Victors from Corinth, Megara, and Sparta: the chief metropoleis of the western colonies, and the victor in the Messenian war.

III. Olympiads 17-19: 712-704 B.C. Victors from Epidauros, Sikyon, and Megara. The first two are cities of the Argive league, and Megara has just fought a war of liberation against Corinth. The appearance of the Argive league at this period, just after the first Messenian war, corresponds to our relative dating of the battle of Hysiai in section β1 above.

IV. Olympiads 20-33: 700-648 B.C. Nine Spartan victories in 14 celebrations are a clear sign of belief in Spartan hegemony at this period. The Achaian from Hyperesia in 688 may stand for the Achaian metropoleis of this period; while Kratinos of Megara in 652 (twelve years before Kylon) presumably represents the Megara of Theogenes. The most interesting entry is Pantakles of Athens, victor in 696 and 692: the first is 480+ 27 x 8, and so this entry may well come from a family tradition. The other Athenian in 672 is 464+ 39 x 5⅓, and serves later to mark the earliest Pisatan date.

V. Olympiads 34-36: 644-636 B.C. Stomos of Athens victor in the stadium 644, Kylon of Athens in another event in 640 and Phrynon of Athens in the stadium in 636. This cluster of Athenian Olympiads marks an era, primarily, in Athenian chronography of the archaic period, and is interesting here as showing the dependence of Hippias on Athenian sources. It is possible that Hippias' notion included the Pisatan Olympiad in 644: it certainly

did not admit the series, for there is no sign of Pisatan influence in the victor list of period IV (apart, possibly, from the Athenian victor of 672), and at 572 (the last Pisatan Olympiad), Hippias has an Elean victor.

Pausanias, in his history of the festival (§.8-9) has a view of the development of the festival which may possibly go back to Hippias: from 776 to 644 the events added from time to time were a result of the fact that by 776 "people had forgotten the ancient customs, and only gradually remembered them, and as they remembered them piece by piece, they added them to the Games." In this account, where Herakles' prototypical celebration serves as the ἰδέα which is only slowly realised, we may have a reflection of Plato's influence on his contemporary Hippias.

VI. Olympiads 37-49: 632-584 B.C. Another period of Spartan dominance, with 8 victors in 13 celebrations. There is a Theban in 616: this may be a family tradition, for 616 = 427(the capture of Plataia)+ 27 x 7. The Epidaurians in 608 and 600 presumably represent the tyranny of Prokles, father-in-law of Periandros; Kroton, the first colony in the list, appears in 588 and 584: the date 588 is 510(fall of Sybaris)+ 39 x 2, and so presumably represents a family tradition.

In Pausanias' history, 632 marks the beginning of the period when the Eleans abandoned "memory" for deliberate organisation and added a number of boys' events to the celebrations.

The Herodotean story of the Elean embassy to Egypt in the time of Psammetichos II (595-89) speaks of the satisfaction of the Eleans at the organisation of the festival at that period.

VI. Olympiads 50 onwards: 580 B.C. and later. From this point onwards the list has a very much more natural appearance, and may perhaps be designated as protohistorical, passing into the historical at an unknown stage. The year 580 is named by Pausanias as that of the institution of two agonothetai, replacing the descendants of Iphitos who had previously held the office.

It would therefore appear that the victor list before 580 is a simple construct, assigning victors to cities believed to be of political importance, and only occasionally including victors for reasons of family tradition rather than politics. The list therefore, for the years before 580, expresses Hippias' historiographic views, and comparison of other traditions withit is of value only in so far as Hippias' historiography is relevant to the purpose in hand. It seems certain that Hippias was much indebted to the Athenian chronographic school, and did not recognise the serial tradition of Pisatan Olympiads, although he has Athenian victors in both 672 and 644.

(d) Pausanias on Elis, Pisa, and Corinth

The historiographic association of Pisatan Olympiads with Athenian victors is remarkable; at the later date one of the Athenians is Kylon the would-be tyrant, and the client of Megara. This cluster of Athenian victories in 644-36 must represent a precise historiographic concept, and it is associated in Pausanias' version with the end of the period of "memory". Interpretation is difficult because of our ignorance of the historiography intended by the various sources: there are three indications of a possible true date, but, although they converge,

they are by no means conclusive evidence. The strongest is the Herodotean story of Elean satisfaction with the organisation of the festival in the years 593-89: this suggests a terminus ante for the period of "memory". Second, the generation-date 644 = 514 39 x 3 suggests (on 25-year generations) a date around 600 B.C. for the end of the period of "memory", the Athenian cluster of victories, and the single Pisatan Olympiad. Thirdly (and this is another aspect of the second, and not independent evidence: see chapter 5Eii(γ)6), the tyranny of Kylon probably belongs to the decade 595-85, and so his victory might belong to the previous decade. All this, for what it is worth, points, to the first years of the sixth century as decisive in Elean development.

Pausanias is our chief authority for a narrative history of Elis, and he treats his source with scant respect, and apparently properly so, for it seems to contain a number of improbabilities and inconsistencies. He treats of the history of Elis under three heads: (1) the history of the state, (2) the history of the festival, and (3) the history of the Pisatai (5.1-4; ~~5.6ff; 6.22~~ 5.7-6ff; 6.22): the last probably comes from a different source, ultimately Ephoros.

The great event in the history of the state is its conquest by Herakles after his quarrel with Augeias. To this period Pausanias assigns the quarrel with Corinth and the immunity of Pisa. In addition to the legendary origin of the quarrel with Corinth, Pausanias also reports a historical dause just after the death of Kypselos, and a mythical cause in the murder of two boys at the Isthmia. This last seems to be a variant of the Kleobis

and Biton story popular in the first half of the sixth century. The story about Kypselos is that he had offered a statue in Olympia; after his death, the Corinthians wished to dedicate it as from the city, not the tyrant; the Eleans refused, and the Corinthians thereupon excluded them from the Isthmia. Kypselos died in (x +)506 (see chapter 5Ei), which gives a terminus post for the quarrel, or this aspect of it.

The legendary account of the quarrel adds some quasi-political details: on discovering that Herakles was the murderer of the Molionids, the Eleans appealed to Argos for redress; on her refusal, they asked the Corinthians to exclude Argives from the Isthmia; when Corinth refused, the Eleans were bound by a curse not to participate in the Isthmia themselves. This extraordinary story makes no sense: we should expect that the Eleans would have excluded the Argives (if not the Corinthians also) from the Olympia, and not themselves from the Isthmia. It seems likely therefore that the story has been put together from different elements, and the talke of the negotiations between Elis, Argos and Corinth will belong to the fully political times of the archaic period.

The other story of Herakles tells how he ravaged Elis and Pylos, but spared Pisa, because of an oracle from Delphi, beginning "Dear to my sire is Pisa". This oracle seems to be out of place: addressing the son of Zeus, the Pythia would surely be held to have said "Dear to thy sire is Pisa". The story would thus seem to be contrived to give a context to an oracle which had to be explained away: and an oracle forbidding an attack on Pisa can only have belonged to the period of the Pisatan tyranny.

The second most important event in the history of Elis is the Aitolian invasion at the time of the Return. These Aitolians were kinsmen of the Herakleids (5.3.7), and on his arrival Oxylos celebrated the Olympia (5.8.5). Pausanias knew the genealogy of his descendants (5.4.3), but, irritatingly, does not give it, although they were apparently agonothetai from the time of Iphitos to 580 B.C.(5.9.4). After Oxylos, the celebrations were discontinued for an unknown period, but in the time of Lykourgos, Iphitos restored the games and the truce under instructions from Delphi, and also began the sacrifices to Herakles, whom the Eleans (sic) had previously regarded as their enemy (5.4.5f). Pausanias' omission of the genealogy of Oxylos is particularly regrettable, for we can neither analyse it for anchisteia structure, nor see what use the chronographers made of it: if they used it, they could have given dates for the period during which the festival was discontinued, which Pausanias declines to state. The three patronymics of Iphitos suggest however that he, like Lykourgos and Pheidon, was placed in three different anchisteiai. The story that the Eleans regarded Herakles as their enemy cannot mean the Eleans of Aitolian extraction, who were kinsmen of Herakles, but must mean the older inhabitants of the country (i.e. those usually called Pisatai); Iphitos' institution of the sacrifice to Herakles, at a time when Sparta (through "Lykourgos") and Delphi were interested in the festival probably reflects sixth-century, and not earlier, conditions.

Pausanias' account of the festival in pre-Herakleid times does not concern us here.

His Pisatan history states that Pheidon and the Pisatai were agonothetai in 748, and Pantaleon of Pisa was agonothetes in 644; in 588 the Eleans attacked Demophon of Pisa, and some time later destroyed the kingdom of Pyrrhos of Pisa and the towns ofhis allies. Of these dates, we have seen that 748 is an anchisteia to early, and represents a chronography of 514 + 39 x 2; and that 644 = 514 + 39 x 3⅓. The date 588 = 480 + 27 x 4, and so is probably not more than a decade from the true date. The non-Pausanian dates for the Pisatai are 672 and 572, which are 464 + 39 x 5⅓ and 464 + 27 x 4 respectively. Thus the same interval of one and a third generations appears in the two traditions: in one it states the beginning and end of the Pisatan tyranny; in the other the time between the Pisatan Olympiad and the Pheidonian intervention.

The irreducible minimum of the Pisatan traditions thus concerns one and one third generations of a time of troubles in Elis. The stories of the ending of "memory" and the beginning of organisation, of the quarrel between Elis, Argos, and Corinth, of the reorganisation of the festival with the aid of Sparta and Delphi, of the Pisatan tyranny and the Pheidonian intervention, the oracle forbidding an attack on Pisa, all seem to come from the conditions of this period. The indications of date in the first two decades of the sixth century come from Pheidon's anchisteia dating; from the Herodotean story dated to 593-89 and the period of deliberate organisation in the Pausanian tradition; culminating in the appointment of two agonothetai in 580; from the chronography of the tradition of 644 B.C., and the career of Kylon; the importance of the death of Kypselos in

(x +)586 B.C. in the story of the quarrel with Corinth, and of "Lykourgos" in the story of Iphitos; and the Elean attack on Pisa soon after 588 B.C.

3. Sikyon and Epidauros

With the hypothesis that Pheidon's true date was in the first two decades of the sixth century, we must consider two traditions of this period which do not mention his name, about Corinthian relations with Sikyon and Epidauros. Isodemos, the elder brother of Kleisthenes of Sikyon (father of Agariste who was wooed by Pheidon's son), was deposed because of intrigues with Corinth about 584 B.C. (see below chapter 5 Eii(γ)3); another story says that Periandros used Milesian forces from his ally Thrasyboulos in a war against Sikyon. The Herodotean story of Periandros' war against his father-in-law Prokles of Epidauros dates it after the death of Melissa and the quarrel of Periandros and his son Lykophron. Since Lykophron apparently died childless and unmarried, the Epidaurian war should not be placed too early in the reign of Periandros, whereas the Sikyonian war would seem to be in the first fes years of his reign. After Kleisthenes succeeded Isodemos however, we find Sikyonians, Argives (?: Kallisthenes ap. Athen. 13.560c) and Athenians allied against the Kirrhaioi in the Sacred War (571-68) and Leokedes of Argos wooed Kleisthenes' daughter (559/8); it is after this that the anti-Dorian changes in Sikyon should be dated (see below chapter 5Eii(γ)3), although Kleisthenes' early preference for Hippokleides amongst the wooers suggests that he was already favourable to the Kypselidai, whose last Corinthian representative, Psammetichos, was perhaps reigning about this time. Kleisthenes' change of policy would thus approximately coincide with the end of

the Corinthian tyranny.

These traditions make Argos strong enough to defeat Corinthian ambitions in Sikyon about 584, too weak to hold Epidauros some years later, and losing even the allegiance of Sikyon about 558/7. These events may therefore belong to the period of Argive decline after Pheidon, ending with the loss of Thyreatis (and perhaps the deposition of Meltas) in about 546.

4. Argos from the battle of Hysiai to the loss of Thyreatis

We now enter upon the second part of this hypothesis: the first has been to identify the disiecta membra of narratives relating to this period, and now they must be put together to form at least a consistent, if not a compelling, narrative. We may first of all tabulate our results, using the Spartan named generations as a measure:

SPARTA	ARGOS	ELIS
		(c.680: Pantakles of Athens victor: so the festival already more than local)
c675 Polydoros First Messenian War c684-65 (see p.280)	Eratos expels the Asinaioi. Battle of Hysiai c660.	
c650 Eurykrates		
c625 Anaxandros Second Messenian War c625-609 (death of Aristo-krates II of Arcadia c 609: his son-in-law was Prokles of Epidauros)	Demokratides expels the Naupliatai.	Iamidai allies of Messenia. (x +)616: Kypselos of Corinth. (Theagenes of Megara)
c600 Eurykratides Capture and loss of Phigaleia c599		c598 Pantaleon of Pisa Athenian victors in the Olympiads include Kylon. 593-89 Eleans in Egypt

SPARTA	ARGOS	ELIS
	PHEIDON	?588: Pheidonian intervention and Pisatan Olympiad (x +)586: Eleans appeal to Corinth against Argos and quarrel with Corinth. "Dear to my sire is Pisa"
	c584 Isodemos, client of Corinth, expelled from Sikyon. Corinthian attack on Sikyon. Hostility of Argos and Corinth reflected in the Aktaion story. (Kylon, Megarian, i.e. Argive, client, put down in Athens.)	
		c580: Elean attack on Pisa Two agonothetai
	Periandros takes Epidauros.	
c575 Leon Lykourgos The Arcadian Wars	(c577-68 the Sacred War frees another national sanctuary from an oppressor) c559: Leokedes woos Agariste of Sikyon c557: Sikyon leaves the Argive league (fall of Corinthian tyranny)	
		c564 "last Pisatan Olympiad"= fall of Pyrrhos of Pisa Iphitos and "Lykourgos"
c550 Anaxandrides II The Peloponnesian League		

Some comments on this proposed sequence of events may be ventured:

(1) In the second Messenian war, the Arcadians were officially allies of Messenia, but Aristokrates II was pro-Spartan and executed for his policy at the end of the war. Thus there seem to have been two parties in Arcadia at this time, of which the Spartan was the weaker, and

thenceforward disappears from Arcadian history for half a century. We may perhaps suppose that in Elis a similar division of policy became evident at the end of the war, and that while the name Eleans continued to be used for the community at large, the Pisatai and Eleans were also the names used in later historiography for the two parties, the former being anti-Spartan and (as in Arcadia) remaining dominant for rather more than a generation.

(2) On the dates suggested here, the tyrannies of Corinth, Megara, and Epidauros arise shortly before 600. In the case of Corinth, the rule of Kypselos may be associated with a change in the pattern of Corinthian trade, for in the last quarter of the seventh century Corinthian pottery begins to appear in the Milesian colonies (previously supplied by Rhodes) and at Naukratis. Rather earlier, beginning 650/40, increasing 640/25, and showing its greatest intensity 625/00, Rhodian pottery reappears in the west,[32] suggesting that Rhodian interests were promoted by the second Messenian war, and that a result of the larger aspect of this struggle was the change in Corinthian policy which appears about this time, and which took its political form in the tyranny. The function of

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the Corinthian tyranny would therefore be to arrange the best possible terms for the abandonment of the western monopoly of Corinth in exchange for Corinthian commercial penetration of Egypt and the Pontos. There can have been nothing easy in this work, and though it seems on the whole to have been successful, there must have been many mistakes and setbacks. On the dating here proposed, Kypselos came into power in a situation where

Sparta had reconquered Messenia, but Elis, Sikyon, Arcadia and Argos were hostile and unharmed: the tyrannies of Pisa, Sikyon, Epidauros and Megara may have been formed in opposition to, rather than in imitation of, Corinth. During his reign, Kypselos seems to have made Elis friendly, and he married his son to a princess of Epidauros. It seems likly too, that a Corinthian party was growing in Sikyon, and an anti-Corinthian party in Athens: Athenian pots begin to appear in Corinthian markets from 610 onwards, at first in Etruria and southern Italy, but not in Sicily till 580, which suggests that the Athenian struggle to penetrate the Corinthian markets was hard in the time of Kypselos, but much easier under Periandros, after Kylon's revolt. It would seem too that Kypselos managed to keep the peace with Argos, though here we may perhaps suppose a considerable commercial struggle, marked on the Argive side by the Pheidonian coinage.

Early in Periandros' reign the accumulated tensions begin to find outlets: Argos and Corinth have their client parties in Sikyon, where there seems to have been a full-scale war, ending in a victory for Argos, still without an open breach with Corinth, though the Aktaion story may hint at a factional willingness to treat with Argos about this time. Pheidon's intervention in Elis (and, possibly, the Kylonian revolt) perhaps belongs to the end of Kypselos' reign: the "Elean" quarrel with Argos which spread to Corinth after Kypselos' death seems to be its result: the policy of keeping an overt peace with Argos will be reflected in the oracle prohibiting an attack on Pisa. By about 580 however the Eleans invade Pisa: we may perhaps suppose that Pheidon was by now dead. A possible date for the Corinthian attack on Epidauros

is 580-70; this decade is also occupied by the Sacred War, and the next by the fall of the Pisatan tyranny, with Elean rule established. Thus on these dates, the freeing of the two great national sanctuaries from oppressors occupies a single period; and since previously Delphi seems to have been in the Corinthian sphere of influence, and Olympia in the Argive, this liberation may mark a stage in the achievement of an overall competitive economy replacing the older blocs with monopolistic tendencies. Probably by 555 "Iphitos and Lykourgos" had established the Olympic truce.

Thus the narrative which is outlined here may be said, in general, to describe the traditionally selected events that marked the process of birth of the Greek market and competitive economy. The struggles between Sparta and Messenia, Corinth abd Argos, and within Olympia and Delphi, represent stages of the breakdown of an earlier and more controlled system, organised on the basis of kinship groups which were slave-owning (varying from the family farm to the corporate Spartan exploitation of Messenia before the second Messenian war). The period of maximum freedom however seems to have been as short as it was intolerable, at least in Attika, where the chronographers allow less than a generation from Kylon's revolt to Solon's institution of a limited market economy.

ii. historiography of Pheidon

The third part of this hypothesis comprises an attempt to account for the disintegration of the Pheidonian tradition, if it originally dealt with the events of the first two decades of the sixth century. Among the first of these causes there is the fact that very little of our material represents Argive

tradition: most of the Pheidonian and Pisatan narratives come from histories of Hellas, not of Argos, and they have a Spartan and Elean bias.

The two sides of the traditional character of Pheidon are already present in Herodotus: he is the establisher of a new order and the violator of the old. The orders he established and overthrew are elaborated by Ephoros: the new is the market and money economy of the sixth century, and the old is the Spartan-Corinthian dominance of the seventh. In the contrast between Pheidon and Lykourgos, the struggle between Argos and Sparta is to a considerable extent cast in fourth-century terms: the choice is made to lie between a land-owning and a commercial oligarchy. Aristotle's characterisation of the king who turned tyrant is more historical, for the competitive market economy which began to develop at the end of the seventh century is, it would seem, closely associated with the rise of the tyrants, and Pheidon's policy of reassembling the heritage of Temenos suggests an attempt to use old kinship groups and religious associations to organise the market economy.

The retrodating of Pheidon to the ninth and eighth centuries and the similar retrodating of Lykourgos, illuminate some characteristics of Peloponnesian tradition. When Pheidon and Lykourgos are contemporaries of Agesilaos of Sparta, they belong to the generation before or after (according to the reckoning used) that Dotadas of Messenia who built an extra port at Methone: so that the commercial Messenians are seen to be as subversive of the Spartan order as Pheidon himself. (We may perhaps suspect that

this extra port served a trade in slaves and metals, for Homer already knows of Sikel slaves and Taphian trade in ore.) When Lykourgos and Pheidon are contemporary with Alkamenes, the expansion of Sparta to the coast, and overseas to Crete, is threatened by the Argive allies of Messenia in the coming war. The careers of Pheidon and Lykourgos are thus used in various ways to incarnate the struggle of good and evil in the archaic Peloponnese, and the dates given them depend on the view taken of when the decisive moment in the development occurred. The Messenians were a constant danger to Sparta, and a combination between the helots, the exiles, and other states hostile to Sparta was always a possibility, so that the Spartans and their friends had every interest in propounding a moral and historical view which justified their ancient title to Messenia. Even in Pausanias' time, the legendary wrongs and causes of the conquest were still of interest enough to be detailed.

The restoration of Messenia and the rise of Macedon in the fourth century have also left their mark on the tradition, for the ancient ally of Messenia is now seen by Theopompos as the ancestor of the Macedonian kings, and Pheidon, like Philip, may be envisaged as the harsh portent of a difficult new world.

It would appear therefore that in Herodotus' time it was still possible to take Pheidon's true date for granted. Sometime between Herodotos and [illegible] on the one hand and Theopompos and Ephoros on the other, the problem of general Peloponnesian history was examined, and the conclusion reached that Pheidon must have been about contemporary with the retrodated Lykourgos, and that the Pisatai

were his allies, though the genealogy of the tyrants could not be stretched to Pheidon's early date. Thenceforward, particular developments occurred: variations in the precise dating of Pheidon according to the view taken of Lykourgos; development of the Pisatan traditions in Elis, and the overpowering of the old Elean traditions by new exegesis of oracles and title-deeds. There would seem to be here no phenomenon which is unparallelled in Greek historiography, and the prime cause is the retrodating of Lykourgos by Spartan ideologues and apologists.

C. The Athenian Lists

The surviving Athenian material is abundant and complex. It contains some highly elaborate chronography, due to anonymous sources as well as Apollodoros and Kastor; some of the chronography was complete by the time of Hippias of Elis (see section iii below). It also contains in the traditional dates of Peisistratos some crude prechronographic formalism which takes what appears to be the naturalistic date of the birth of Hippias as the beginning of the generation or political career of Peisistratos (see chapter 5Eii(β)2 below). Because these several layers of work exist, the history of pre-Apollodoran chronography can to some extent be reconstructed.

The character of the sources divides Athenian history into three main periods: first, the monarchical: this contains the chronography of the mythic basileis ending with Kodros, and that of the archaic "perpetual" archons ending with Alkmeon. The various lists are analysed, and the text of Kastor discussed, in Appendix III. The second is the period of the decennial archons, which is included in two of the four lists with the monarchic period. The third is the period of the annual archons before 514, the general structure of which is discussed in sections iii and iv below. The problems of dating which concern Solon and Peisistratos are reserved until chapter 5, when the Herodotean and other dates are compared for both method and material.

i. The monarchy

There are four surviving lists of the Athenian monarchy: of these, two are systems of known date, the fragmentary list of the

Marmor Parium belonging to the third century, and Kastor's to the first century B.C.

The list of the Marmor Parium resembles that of Kastor for the period before Troy, and, so far as can be judged from the fragmentary references, that of the original of the Excerpta Barbari for the post-Trojan period. Its list begins in 1581 B.C., and since 1581-754 is the chronographic period of 27 x 30 years, this suggests that the Parian agreed with other chronographers in ending the reign of Alkmeon in 754. It dates Kreon the first annual archon to 684, by exclusive reckoning, which inclusively taken is equivalent to 683, the usual chronographic date (39 x 3 years before the first Panathenaia in 566 B.C., and 39 x 4⅓ years before the murder of Hipparchos in 514). Its early dates for Troy (1209) and the Ionian migration (? 1077, which is 27 years after 1104) suggest that it was based on the Chronographic Model, that is, gave the generation of Agis its full value. This is borne out, as we have seen in Appendix II, by its dates for Herakles and Pheidon.

Kastor's list covers the years 1556-684 = 27 x 32⅔ years, giving the basileis 27 x 17⅔ + 4, and the archons 27 x 14⅓ + 5. The period of the perpetual archons (27 x 12 - 2) is too short to be based on the Chronographic Model, wherein 39 x 9 = 27 x 13, but has the length appropriate to the Corintho-Attic construct which is based on the equation 36 x 9 = 27 x 12. The devaluation of Agis' generation by Apollodoros and Kastor destroyed the formal utility of the Chronographic Model, and the Corintho-Attic construct is the alternative formal basis. The Corinthian lists

extant (see Appendix IV) probably therefore derive from Apollodoros and Kastor. In spite of this formal basis, and the fact that his structure ends in 684, Kastor retains the date 753 for the beginning of the decennials from the chronography of the Model.

The other two surviving systems are of unknown date and provenance. The original of the Excerpta Barbari covers the years 1590-754 = 27 x 31, and calculates the archontic period in 39-year generations, allowing 39 x 9 years. It is therefore based on the Chronographic Model, and is non-Apollodoran. The length of the period 1590-754 (this list has the earliest upper terminus), and the simplicity of its figures, suggests that it is also pre-Apollodoran. It has some resemblances to the list of the Marmor Parium, and probably belongs to the fourth or third century: it is not earlier than the end of the fifth, for it uses the third of a generation, which first appears in Thucydides. If it dated the fall of Troy in the last year of Menestheus, its date was 1222, which is 39 years earlier than the Apollodoran date (Apollodoros' reduction being due to the devaluation of Agis), and only 6 years below the probable date of Troy given by Herodotus. Apollodoros dates Troy in the last year of a generation, while Herodotus seems to have allowed for the seven years of Aigisthos within the generation of Troy. The probable date of 1222 given by the Barbarus' list therefore supports the suggestion that his original was from a fourth

or very late fifth-century source. It may also be noted that this is the only surviving list which places the accession of Melanthos, and therefore the Boiotian Return, 60 years after Troy, which is Thucydides' figure; it also implies the dating of the Return to 1143, the date from the Chronographic Model and the 80th year after Troy in 1222.

The original of the list in the Chronographeion Syntomon seems to have covered the years 1547-684; it uses the archontic period 27 x 12⅓+1 down to 753, and its last year of Menestheus dates the fall of Troy to 1212, three years earlier than the Marmor. The Marmor however based its list on the Chronographic Model and ended its structure in 754, while the Syntomon has a shorter archontic period and includes the decennials in its structure. These considerations suggest that the Syntomon list is an archaising variant of the Apollodoros-Kastor tradition rather than a pre-Apollodoran survival.

ii. The decennial archons

The period of the decennial archons is chronographically important because it is the link between the generations of the Chronographic Model and the generations of the annual archons with the Athenian base-date of 514. But the period also has a wider interest, for the decennial archonship is a constitutional device which is unique in all the detailed constitutional traditions that have survived; although Aristotle's reference to long-term offices may mean that similar devices were employed in other communities, and the records have not survived.

The "perpetual" archons are said by the Eusebian school to have inherited by filial succession. The evidence from the

Peloponnese of anchisteia inheritance in early archaic times makes this assertion about the archons incredible. The traditions also state that these archons were Medontids, andthere is now epigraphic evidence that the Medontidai were a phratry: we should probably therefore take it that the phratry, and not an oikos, was the kinship unit concerned.

The only other archaic dynasty which we know was drawn from a phratry was that of the Temenid kings of Argos, whose records are almost non-existent. It is however possible to suggest that continuous named generations did not exist in the Argive (as distinct from the Macedonian or pseudo-Macedonian) traditions before the time of the third anchisteia after the Return. It seems unlikely that it is a mere coincidence that the same upper terminus appears for the continuous named generations of the Eurypontidai and Aigeidai at Sparta. The very tentative suggestion is therefore that in Argos and some portion of the Spartans, and during the period equivalent to the third anchisteia at Corinth and among the Agiadai, some social change occurred in Argos and Sparta, and that in Argos this may have taken the form of one cousinhood (to use Drakon's term) emerging as senior within the phratry, whereas about the same time in Corinth, the Bacchiad anchisteia evolves into an oligarchic corporation.

The Attic traditions of the transition from the "perpetual" to the decennial archons are for the most part uninformative. On the death of Aischylos, Alkmeon became archon; but his rule only lasts 2, 10, or 12 years before the decennial archonship was instituted. The first decennial archon was Charops the son of Aischylos; the second his brother Aisimedes; the third his nephew

Kleidikos; the fourth was Hippomenes, at the end of whose reign the archonship was opened to non-Medontids: three non-Medontid decennial archons follow before the institution of the annual archonship in 683.

Among the names of the perpetual archons are some which recur in the historical genealogies: Megakles and Alkmeon among the Alkmeonidai, and Ariphron among the (?)Bouzygai. These names would not appear in a list of Medontids unless the historical Alkmeonidai and ?Bouzygai belonged to the Medontid phratry. If the Eusebian school had not represented the perpetual archons as inheriting by filial succession, the difference between an archonship passing from group to group within a phratry, and the inheritance of the sons and grandson of Aischylos, would have been clear: in view of the Eusebian statements however it is only possible to say that such a difference is not incompatible with the very tenuous evidence for a similar development four generations earlier among some of the Peloponnesians; that the limitation of length in tenure of the archonship is not incompatible with a desire to establish the prestige of a single anchisteia by ensuring that several of its members held the office; and that the interventions of Alkmeon and Hippomenes deonstrate that, if a single anchisteia did so assert itself, it did so in the face of initial difficulties and was finally unsuccessful.

In any case it remains true that apart from this doubtful instance, the earliest evidence for the existence of the historical form of the anchisteia in Attika is in Drakon's code; and the examples of marriages within historical anchisteiai show that the

clan had wholly ceased to be an exogamous unit, its place being taken by the oikos. Before the emergence of the oikos as the basic social unit therefore, the anchisteia must have included, by necessity and not just by chance, people of different clans: but these may generally have been clans within one phratry. The breakup of the clans into oikoi would thus have considerable effect on the phratric cohesion: so that the historical contiguity of the sons and grandson of Aischylos with the end of Medontid privilege would be explained by this emergence of the oikos organisation. The final reduction of the archonship to an annual office would then have the same purpose as in Corinth some generations earlier, namely to prevent the consolidation of power by a single oikos within the ruling group during a long tenure of office by one of its members.

iii The annual archons up to 514 B.C.

The years 683-515 are equivalent to 39 x 4⅓ generations, and the divisions are clearly marked in Athenian historiography. The beginning of the first generation is the beginning of the annual archons. The beginning of the second generation is marked by the victory of the Athenian Stomos at Olympia in 644, followed by the victories of Kylon in 640 and Phrynon in 636. The end of this generation is marked by the death of Phrynon in its last year, 606: and this dating obviates the necessity of placing an outstanding event in the year 605, the first of the third generation. The beginning of the fourth generation is marked by the Panathenaia in 566, and its end by the death of Peisistratos. The third of a generation covers the joint rule of Hippias and Hipparchos 527-15.

The persons and events placed in these generations are:

I 683-645: beginning of the annual archons. (Tyrtaios on Pausanias' dates for the second Messenian war. Peisistratos archon 669: see below)	Miltiades I archon 664 and 659	
II 644-606: three Athenian victories at Olympia. Kylon. Drakon's code (the anchisteia fully established) The Mitylenian war: Phrynon	Peisandros (marries a daughter of Kypselos)	Megakles I (archon in Kylon's year)
III 605-567: Solon (and Kroisos). Kleisthenes of Sikyon. Pheidon of Argos. Periandros of Corinth	Kypselos and Hippokleides (archon 566)	Alkmeon I
IV. 566-528: the Panathenaia. Tyranny of Peisistratos	Miltiades II and Kimon I	Megakles II
V. 527-515: the Peisistratidai	Miltiades III (archon 524)	Kleisthenes (archon 525?)

The generation count would thus seem to be based on Athenian genealogies. The use of 39-year generations follows from the existence of the Chronographic Model, for calculations from 753 downwards must use either 39-year generations in Athens as well as Sparta, or 27-year generations in Sparta as well as Athens. The use of these particular dates depends on the invention of the third of a generation, and therefore belongs to the end of the fifth century, for the importance of the Olympic victories in the scheme implies that the generations and dates were accepted, as having been already established, by Hippias of Elis when he drew up his victor list. The persons and events of generation III are however given different dates by Herodotus, and the historiography of the western colony list in Thucydides implies the reckoning of Spartan 27-year generations for this period. We should infer that although the Chronographic Model was known to Herodotus, the detailed elaboration of the Athenian annual archon dates had not

occurred. It follows that the archon list for the seventh aand sixth centuries was a late fifth-century creation: the epigraphic evidence suggests a date c430-20 B.C.

The odd third of a generation (527-515) in this scheme can hardly have had any other origin than fact: it does not seem to be a period for which any process of invention can account. Similarly, the importance of Kimon II in 464 and of his father Miltiades III in 490 are events separated in fact by 26 = 39 x 2/3 years, and it may have been this circumstance which led to the appearance of Miltiades I as archon in 659 = 464 plus 39 x 5. On the other hand, any three of these 39-year generations could be taken as 27 x 4⅓ years, and the appearance of Peisistratos the archon in 668 (if that emendation is correct), 108 years before his namesake married Timonassa, suggests that the equation 39 x 3 = 27 x 4⅓ was used by the compilers of the archon list. Similarly, the date of 656 for the accession of Kypselos in Corinth seems to be a reckoning of one 27-year generation after the institution of the annual archonship in 683. The relative dating here is interesting, for an allowance of 25 years to a generation for the first four generations of annual archons would place the beginning of that institution about 627 B.C., while we have already dated the accession of Kypselos about 616, so that the relative dating is maintained.

iv. The development of the Chronographic Model

The question has of course often been raised whether the names given to the generations in the list of the perpetual archons belonged to individuals who really lived about the time stated for each, and exercised the office alleged. So far as time-reckoning

is concerned, the question is irrelevant: once the number of generations is established, the removal of, say, Agesilaos of Sparta from the list and excision of his "generation" is as improper a proceeding as would be the removal of Kallias from the list of archons and the excision of his year 480 B.C. However, unfortunately for this principle, the Attic list of "perpetual" archons is not amenable to anchisteia analysis; consequently another method of estimating the value of the list must be found, which maintains, with a stringency equal to that of anchisteia analysis, a consistent appreciation of the meaning of a "generation" to the ancients.

We have already seen that some of the names in the list recur in historical Athenian genealogies, and that this implies the clans in which the historical names occur were constituents of the Medontid phratry. Similar considerations (in spite of our ignorance of the facts in the specific cases) apply to all the names but one: Medon, the eponym of the phratry, who by being as it were the individualisation of the phratry itself cannot also be regarded as representing one of the clans. The removal of his name from the list is supported by a fact of constitutional practice in Aristotle's day: the archon swore to exercise his office "as Akastos" did. This means that, in practice, Akastos and not Medon was taken as the archontic prototype, and the founder of the existing office.

The name and "generation" of Akastos are thus guaranteed as a part of the genuine tradition, and this is positive evidence. On the other names (except Medon already noted) all that can be said is that there is no negative tradition. We may therefore

proceed to a second test: comparison of the number of generations with the Spartan Agiad list as this appears after anchisteia analysis:

1. Aristodemos	Kodros: mythically contemporary with, and killed during, the last phase of the Return. (Medon is omitted: see above.)
2. Eurysthenes	Akastos (the prototypical archon)
3. Agis	Archippos
4. Echestratos	Thersippos
5. Labotas	Phorbas: the liberation of Megara
6. Doryssos	Megakles (of the Alkmeonidai)
7. Agesilaos	Diognatos
8. Menelaos: the port at Mothone	Pherekles
9. Archelaos	Ariphron (?of the Bouzygai)
10. Teleklos	Thespieus
11. Alkamenes	Agamestor: Theokles of Sikeliote Naxos; Isis grave at Eleusis (280,114)
12. Automedes	Aisdylos: Pantakles at Olympia (p.78)
13. Polydoros: 1st Mess. War	Alkmeon and the first decennials
14. Eurykrates	the later decennials (If Peisistratos the archon is not a fiction, but derived from a genuine family tradition, he belongs to this generation.)
15. Anaxandros: 2nd Mess. War	1. Miltiades I etc. Kypselos
16. Eurykratides: Pheidon	2. Megakles I etc. Kylon
17. Leon: Lykourgos	3. Solon, etc.
18. Anaxandrides II	4. Peisistratos the tyrant
19. Kleomenes	5. Hippias: Kleisthenes: Miltiades III

The synchronism of Polydoros and the beginning of the decennials according to this generation count is also the synchronism of the Chronographic Model, but the lists of the Model differ (a) for Sparta in omitting Menelaos and Automedes in order to retrodate the three-generation anchisteia, and (b) for Athens by including the name of Medon. Consequently at Athens the Model list from Medon to Alkmeon contains 13 names, and at Sparta from Eurysthenes to Alkamenes 9 names. The differences between the lists above and those of the Model are therefore accounted for by developments in traditional narratives independent of chronography.

One of the curious conventions of the chronographers is that the perpetual archon Aischylos always (except in a notice in Synkellos, for which see Appendix X section B) has 23 years of reign, while the figures given for Alkmeon and the decennials together vary between 72, 80, and 82 years. Since 23 = 27 x 1 minus 4, and 82 = 39 x 2 plus 4, it seems probable that this pair of figures originally belonged together in some system which endeavoured to "preserve the phenomenon" of a natural appearance at the point where the Chronographic Model ended, and extrapolation from it of 39-year generations began. The 72-year reckoning of Alkmeon and the decennials on the other hand equals two Corinthian generations of 36 years, which suggests that this reckoning was due to a system using the Corintho-Attic construct. We know that Apollodoros probably, and Kastor certainly, operated on this basis, but Kastor gives Alkmeon and the decennials 12 plus 70 years. His text however is deeply affected by the 2 plus 70 tradition, so that the 2 years of Alkmeon probably represent the Apollodoran list. The reason for the 10 plus 70 years of the Excerpta Barbari is unknown.

D. The Thalassocrats

We have now considered all the dated lists of kings which survive for the archaic period, and discussed the nature of the generations on which they were based. The first applications of arithmetic to the synchronous history of Athens and the Peloponnese seems to have been made shortly before Herodotus' main work was written. It is a question whether there was an established synchronous history in pre-chronographic times, which would be based entirely on generations, without raising the question of year dates. If there was not, then the inventor of the Chronographic Model must have selected the lists and legends which he used: a man capable of this and working in the third quarter of the fifth century was Hellanikos, but he is quoted for legendary variants, not for dates, so that the attribution, although probable on general grounds, is not certain.

The synchronous history contained in the Chronographic Model is of Athens and Sparta. The approximately contemporary model used by Herodotus employs the traditions of Sparta and Lydia, but presupposes the existence of the Model. In that generation therefore the principles of the Model were known, but their application was still fluid. We do not meet a systematic treatment of Aegean or Asiatic material again until the work of Kastor of Rhodes in the first century B.C., and we have no means of judging what, in this field, may once have existed and been lost, other than a general impression that the material may have been considerable.

Kastor's contribution to this field seems to have been a systematic list of "thalassocrats", based mainly on East Greek traditions. The list of thalassocracies comes down to us in two

forms, one in the Armenian Eusebius, and one in Jerome. Neither of these is complete, so that criticism either proceeds from comparing the named thalassocrats with other Greek traditions of the same communities (i.e. historical criticism) or by attempting to reconstruct the texts on chronographic principles. A chronographic analysis of this kind is set forth in Appendix V, and the two versionswhich emerge are:

The Armenian Version				Jerome's Version			
Thalassocrat	Years	Date B.C.		Years		Date B.C.	
<Fall of Troy		1188>					
<Nostoi	2	1187-1186>					
Lydia	92	1185-1094	39 x	<98>		1173-1076	27x9⅔
Pelasgia	85	1093-1009	7+6	<75>		1075-1001	
Thrace	79	1008- 930		<88>		1000- 913	
Rhodes	23	929- 907		23	39x	912-890	
Phrygia	25	906- 882	27x3	25	4⅓	889- 865	27x3
Cyprus	33	881- 849		33		864- 832	
Phoenicia	45	848- 804	39x4	<49 or 50>		831- 783/2	
Egypt	53	803- 751		<34 or 35>		782/1-748	27x6
Miletos	17	750- 734	39x2	<26 to 28>		747- 722/1/	
Caria	61	733- 673		<50 to 52>		721/19-670	
Lesbos	96	672- 577		69	39x8	669-601	
Phokaia	44	576- 533	39x4	<68?>		600- 533?	27x6
Samos	16	532- 517		<13?>		532?- 520	
Sparta	2	516- 515		12		519- 508	
Naxos	10	514- 505		10	39x	507- 498	
Eretria	15	504- 490	39x1	7	1	497- 491	27x1
Aigina	10	489- 480		10		490- 481	
<All Hellas	2	479- 478>					
<Athens		477=>					
	708 = 39 x 18 +6			693 = 27 x 25⅔			

The Armenian version, as reconstructed, is based on two fragmentary lists, one in the Chronographia and one made up from entries in the Kanones. Jerome was aware of the existence of this list, which influences his own text considerably. The inference is that the Greek Eusebius contained both, one being Kastor's original list, and the other being Eusebius' own attempt to reduce Kastor's dates to fit his own general chronographic system.

The nature of the difficulties Eusebius would encounter in such a change of notation may be shown as in the following diagram, which is based on the attribution of the Spartan list from the Excerpta Barbari to Kastor, and Jerome's dating of the Apollodoran list of Agiad kings.

The Armenian Version			Jerome's version	
		Lydia 1185	1173	
Eurysthenes	1107			1101
		Pelasgia 1093	1075	
Agis	1065			1059
Echestratos	1063			1058
Labotas	1029			1023
		Thrace 1008	1000	
Doryssos	992			986
Agesilaos	963			957
Menelaos	933			omitted
		Rhodes 922	912	
		Phrygia 906	889	
Archelaos	889			913
		Cyprus 881	864	
		Phoenicia 848	831	
Teleklos	829			853
		Egypt 803	782/1	
Alkamenes	789			813
Automedes	762			omitted
		Miletos 750	747	
Polydoros	737			776
		Caria 733	721/19	
		etc		

There is no direct relationship between the dates of the two versions: Eusebius has not merely dated his thalassocrats to the same regnal years of the Spartan kings. If Eusebius' list is a derivative of Kastor's, the relationship between the two must be indirect: Eusebius, that is to say, will have restated, in terms of his own dates, the calculations upon which each entry in Kastor's list was based, and it is clear from the chronography of his datings that this restatement was not confined to a simple reduction based purely on historical considerations like, for example, our own reduction of the

Spartan royal dates to 25-year generations; but the new dating also involved a transformation of the architecture of the list from a 39-year to a 27-year structmre.

A careful comparison of the individual dates for the various thalassocracies makes it possible to show that a restricted number of base-dates were in use for the calculations needed. Kastor's base-date for his architecture is 477 B.C., the year of the beginning of Athenian thalassocracy, and his dates for Phrygia, Miletos, Lesbos and Sparta are reckoned in 39-year generations, and that for Phokáia in 27-year generations, from this base. The year 477 is however not only a political date: it is also closely related to the Philaid genealogy, being 13 years after the command of Miltiades III at Marathon, and 13 years before the first command of Kimon II in Lakonia in 464. Kastor uses 490, the date of Marathon, as the base for his calculations for Caria. For Rhodes, Phoenicia, and Egypt, he uses 27-year generations based on Kimon's second Lakonian command in 461, and for Thrace (in 39-year generations) and Cyprus (in 27-year generations) he uses the base of Kimon's Cypriote thalassocracy in 449; Samos is reckoned in 27-year generations from 514, which is 39x1⅔ years before 449. Pelasgia is reckoned in 39-year generations before 547, which was an arguable date for the settlement of Miltiades II in the Chersonese. The Lydian date, three years after Kastor's Troy, is equivalent to 27x18+2 above his date for Gyges in 697 (shown by his Lydian list in the Excerpta Barbari: see Appendix IX). Kastor thus uses five main, and two derivative base-dates:

697 (Gyges) for Lydia
547 (Miltiades in the Chersonese) for Pelasgia
477 (Athenian thalassocracy) for Phrygia, Miletos, Lesbos, Phokaia, Sparta
490 (Miltiades III at Marathon) for Caria
461 (Kimon's second Lakonian command) for Rhodes, Phoenicia, Egypt
449 (Kimon in Cyprus) for Thrace and Cyprus
514 (39x1⅓ before 449) for Samos

These same base-dates serve for Eusebius' calculations:
685 (his date for Gyges: see Appendix IX) plus 27x18+2 for Lydia
547 for Phrygia
477 for Pelasgia
461 for Cyprus, Miletos, Caria, Lesbos
449 for Egypt
while 480 is the base-date for his structure as a whole, and serves for the individual entries of Thrace, Rhodes, Phoenicia and Sparta.

A comparison of the two sets of figures shows that Eusebius' problem was the transformation of Kastor's absolute dates so as to maintain his relative dates within a shorter overall period, and at the same time provide an alternative architecture. The main determining factors were therefore historiographic: the acceptance of a later date for Troy, and the inclusion of Odysseus' ten years' wanderings in the Nostoi before Lydia; and at the lower terminus the use of 480 as the limiting epoch instead of 477, that is, the abandonment of a sea-power criterion for a more general historiographic epoch. The desire to find an alternative architecture made it impossible to maintain datings by regnal years of, say, the Spartan kings in Kastor, and similarly the mechanical substitution of lower base-dates for individual calculations is used only in the case of Lydia, Pelasgia, Egypt, Miletos, Caria and Lesbos. Higher base-dates are used for Phrygia, Cyprus and Phokaia: in this last case we also have a different historiography, for Eusebius gives Phokaia two generations of thalassocracy before the fall of Sardis. Historiographic considerations probably also case the different

datings for Sparta and later entries, while Samos may have been tied to Kastor's date by the history of Polykrates. Within the various calculations the different base-dates are balanced by different generation-reckonings:

	The Armenian Version			Jerome's Version		
Lydia	1185:	697 plus	27x18+2	1173:	685 plus	27x18+2
Pelasgia	1093:	547	39x14	1075:	477	39x15 1/3
Thrace	1008:	449	39x14 1/3	1000:	480	39x13 1/3
Rhodes	929:	461	27x17 1/3	912:	480	27x16
Phrygia	906:	477	39x11	889:	547	27x12 2/3
Cyprus	881:	449	27x16	864:	461	39x10 1/3
Phoenicia	848:	461	27x14 1/3	831:	480	27x15
Egypt	803:	461	27x12 2/3	782:	449	27x12 1/3
Miletos	750:	477	39x 7	747:	461	39x 7 1/3
Caria	733:	490	27x 9	721:	461	39x 6 2/3
Lesbos	672:	477	39x 5	669:	461	39x 5 1/3
Phokaia	576:	477	27x 3 1/3	600:	546	27x 2
Samos	532:	514	27x 2/3	532?:	the same	
Sparta	516:	477	39x 1	519:	480	39x 1

It would thus appear that Eusebius was by no means wholly unsuccessful in providing an alternative system of proportions within the very restricted freedom of movement which he allowed himself. His mathematical variants however have no historiographic value.

Historiography of the list

The historiographic interest of the lists is confined to Kastor's datings and the Eusebian variants from the Phokaian entry downwards, where Eusebius sometimes shows an independent historiography.

The entries from Phokaia downwards thus form a historiographic unit. The upper limits of date for Phokaia in 600 and 576 are almost a 25-year generation apart. The year 600 presumably associates the thalassocracy with the foundation of Massalia, that of 576 with the failure of Pentathlos to drive the Phoenicians

from Sidily. Samos is dated 532-17 and (probably) 532-20; 532 will be the accepted date for the accession of Polykrates, and 520 and 517 alternative dates for the Persian capture of the island: Jerome here is nearer to Herodotus, who puts Otanes' departure for the coast in midsummer 521 (see chapter 5 below). Sparta in Kastor's version has the two year 516-15, immediately preceding Dorieus' settlement in Kinyps (unless he meant these to be the first two years of that settlement); Jerome more largely allows 519-08, from the accession of Kleomenes to the Kleisthenic constituion at Athens. Kastor allows Naxos 514-05, perhaps the period after the fall of Lygdamis the tyrant; Eretria 504-90, from the Athenian alliance to the Persian sack, and Aigina from Marathon to Salamis. Eusebius is probably misrepresented by Synkellos for this period: we should read Naxos 507-01 (to the Persian siege), Eretria 500-491 (to the Persian sack), and Aigina 490-81.

The historiography of the earlier portion of the list is a most complex problem, because the entries refer to the eastern Aegean or the Levant, for which we have practically no comparable Greek traditions. On the other hand, we have a certain amount of relevant material from the older civilisations, but to use this we have to find some reasonable hypothesis of true dates for the so-called thalassocracies, that is, we have to discover the bases of Kastor's relative dating, and set it out so that a consistent system of redating is possible. We have already seen that, apart from the Gyges date, Kastor uses base-dates taken from, or inferred for, the careers of the historical Philaidai, and Pherekydes is our authority for their genealogy. Consequently it is possible to set out this line of descent in 39-year generations

from 1218 to 439, and arrange the entries at the appropriate third of a generation, as in the table below. We can then take Kastor's date for Phokaia as belonging to the western traditions, which have a high standard of accuracy (see chapter 6); and, calling this for convenience ~~xx~~ 575, take all the preceding generations as being 25 years in length. We can then examine the entries individually, and collate evidence from outside the list for comparison.

I.LYDIA. The date 1185 is transmuted to 960 in the table, but if we calculate eighteen 25-year generations before Gyges c675 we have 1125 B.C. Neither of these dates is subject to any direct external evidence. There is some very slight negative traditional evidence against the lower date: this generation is that of the Return, which Herodotus makes contemporary with the Pelasgian settlement in Lemnos: immediately, the Pelasgians are most active on the seas, so that we should suppose Lydian maritime activity was earlier. It is possible however that these two thalassocracies were not readily distinguishable: the Tyrrhenians came from Lydia (or Mysia), and there were Tyrrhenes of some sort also on Lemnos.

II. PELASGIA. The date 1093 is transmuted to 905 in the table, and Kastor seems to reckon from the settlement of Miltiades II in the Cheersonese. His Pelasgoi then were presumably those of Lemnos, Imbros, the Aiolic coast, the Thracian coast and the Propontis. The Kaunes seem to associate the rise of this thalassocracy with an "Amazon and Kimmerian" incursion probably directed against the older thalassocrat, Lydia, which suggests that the Pelasgian thalassocracy comprises those "Lydian" outposts which were not affected by these land-raids.

	1218 Aktaios	1	
975	1205	2	.....(Pelasgoi in Lemnos)
	1179	3	...1185: Lydia (but 675 plus 25x18 = 1125)
	1179 Telamon	1	[960] (960: Solomons foundry at Ezion Geber)
950		2	
		3	
	1140 Aias	1	(934: gate of the
925		2	...(Gras in Lesbos) metal workers in
		3	...(incusion of Amazons Assur)
			and Kimmerians)
	1101 Philaios	1	...~~Pelasgoi~~ 1093 Pelasgoi [905]
900	1088	2	
		3	
	1062 Daiklos	1	
875		2	
		3	
	1023 Epilykos	1	...(Thracian invasion of Bithynia)
850	1010	2	...1008 Thrace [848]
		3	
	984 Akestor	1	
825		2	
		3	
	945 Agenor	1	
800		2	...929 Rhodes [797] (Dotadas of Messenia)
		3	...
	906 Olios	1	...906 Phrygia [784]
775	893	2	...
	880	3	...881 Cyprus [768]
	867 Lykes	1	
750	854	2	...848 Phoenicia [744]
		3	
	828 Iophon	1	
725		2	
	802	3	...803 Egypt [718]: Isis Grave at Eleusis: AJA 44 (1940) 161.
	789 Laios	1	
700		2	
		3	
	750 Agamestor	1	...750 Miletos [684]
675	737	2	...733 Caria [671] (Arselis, Gyges)
		3	
	711 Tisandros I	1	
650		2	
		3	
	672 Miltiades I	1	...672 Lesbos [634]
625		2	
		3	
	633 Tisandros II	1	
600		2	
		3	
	594 Kypselos	1	
575		2	...576 Phokaia [575]
		3	
	555 Miltiades II	1	
		2	...532 Samos
		3	
	516 Miltiades III	1	...516 Sparta
		2	
		3	...490 Marathon

III. THRACE Similarly the Kanones associate the end ofthe Pelasgian thalassocracy with a Thracian invasion of Bithynia: the transmuted date for the beginning of the Thracian rule of the sea is 848 B.C.

IV. RHODES. No account of the rise of this thalassocracy survives: the transmuted date is 797, in the generation of Dotadas of Messenia who built an extra port at Mothone. By this time, Assyrian records are fully available for conditions at the eastern end of the Mediterranean trade-routes: the Assyrians were in Kilikia Pedia first in 839, and took Tarsos in 832; they reached the Cappadocian mines after conquering Tabal in 836.

This was the furthest westward advance of Assyria before the rise of Urartu, and she had been concerned with the western metal trade since "the gate of the metal-workers" at Assur was repaired in the years after 934. But from the western frontier of Assyria to the eastern Aegean there is a historical, and almost an archaeological, blank for the whole period of the first four thalassocracies: the Greek traditions as presented in the thalassocracy list are almost all the information we have.

The first problem that arises in interpreting the first four entries is shared by them with the rest of the list: Kastor's attachment to the genealogy of the Philaidai. The Philaidai and Salaminioi were two Attic clans who claimed descent from Aias Telamonios: Telamon is the son of Aiakos of Aigina or of Aktaios, eponym of Akte-Mounychion in Attika. Telamon's other sons were Teukros and Trambelos. Teukros is a heroic name in Crete and the Troad: his son Aias settled in Cyprus, and from here an offshoot of the family settled in Olbe of Kilikia Tracheia on the Kalykadnos

River. The Gergithes of the Troad and many places on the Asiatic coast were recognised as a remnant of the Teukroi, and they share their name with Gargettos in Attika and with the Karkisa who lived in Lydia about 1300 B.C., and were allies of the Hittites.[33]

33. The authority for the Hittite geography used in this section is J. Garstang, Hittite Military Roads in Asia Minor: AJA 47 (1943) pp.35ff.

Herodotus mentions a tradition, otherwise unknown, that the Teukroi and Mysians invaded Greece before the Trojan War; and it is clear from these traditions that the Teukroi and Gergithes were an ancient Aegean-West Anatolian people, whose descendants ranged from Attika to the Troad and Cyprus in historical times, and whose traditions were relatively well developed and preserved: a Lydian "thalassocracy" (of the Karkiša?) from the late twelfth century onwards is not out of place in this context. It is worth noting too that the named generations of the Attic representatives of this people begin at the time when the Pelasgoi of Attika leave for Lemnos, as though this was the period when the Attic clans became recognisably distinct from an older continuum.

The Amazons and Kimmerians whose incursion ended the Lydian thalassocracy are usually regarded as near-fictions. This hypothesis is however unnecessary: the Greeks gave the name of Amazons to any barbarous and matrilinear people, but especially associated the name with Asia, particularly Themiskyra and the Thermodon Valley. The origin of the name may perhaps be sought in the Maša, who around 1300 were living on the Sehiria River around Pessinous, the later cult-centre of the Dindymenian Mother, where the cult-practices may have served to give the "Amazons" their peculiar characteristics; with the suggested transformation of

Maša in Amazons, we may compare that from Sehiria to Sangarios: both show a ~~xxxxxx~~ thickening of the consonants which may be contrasted with Išhara-Hiera.[34] If this origin for the name of the Amazons is correct, a number of mythic references fall into place: Priam's memory, for instance, of a battle between Amazons and Phrygians in the Sangarios Valley; while the Mysians (the usually accepted descendants of the Maša) and Teukrians who invaded Europe before the Trojan War will not remain an isolated reference in Herodotus: they will be the same as the Amazons who ravaged Attika in the "time of Theseus": the deme of Gargettos and the clans of the Philaidai and Salaminioi will be their progeny, while in Asia the Ephesian Artemis, an Amazonian goddess, will derive from the Dindymenian cult.

The association of the Amazons with the Kimmerians at the end of the Lydian thalassocracy suggests however a different situation. The Amazons of Themiskyra and the Kimmerians who so long occupied Sinope lived on the same part of the Pontic coast. Their names are unknown to the Hittites, whose contemporaries in these parts were the Gašga, the Tibya, and the kingdom of Azzi. By the twelfth century the Gašga appear in Assyrian records south of the upper Halys, while the Tibya (Tibarenoi, Tubal) about the same time give the name Tibal or Tabal to a district which the Hittites called ~~xxxxx~~ Tumana. Thus the fall of Hatti was accompanied by an expansion of their ancient enemies from the north: and from the Assyrian records we gather that this was accompanied by the appearance of the Muški (Moschoi), a name which the Assyrians later use for the Phrygians. The suffix -k- or -g-

which appears in Gaš-ga, Muš-ki, Mos-choi, Kol-chis, Pelas-goi seems to be an index of plural number, so that the Muški-Moschoi have a name very similar indeed to that of the Maša: if the two peoples claimed kin, we have a suggestion that an alliance of Maša from the Sangarios, and kindred Muški, with Gašga and Tibya from the Pontic coast were among those responsible for the fall of the Hittite empire, and that this same coalition is represented in Greek tradition by the Amazons and Kimmerioi who seem to have brought down the Lydian thalassocracy. In this case, the higher dates for Lydia (c1125-975) and Pelasgia (975-850) are preferable; and the Amazon-Kimmerian coalition will have ruled Asia Minor for rather more than a century and a half; the Lydian thalassocracy will represent its maritime companion, standing to it as the ~~xxxx~~ Lukka stood to Hatti in the thirteenth century, an unstable and dangerous ally: the Egyptian records suggest that the "Peoples of the Sea" played an important part in the final destruction of Hatti, while the "incursion of Amazons and Kimmerians" suggests that the landward powers were stronger, or wiser, in the tenth(?) century.[35] It will be in association with this Mašan expansion that the more ancient Aššuwa (Asia) is overrun and renamed Mysia.

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34. For Išhara-Hiera, Telephos and Tarchon see P. Kretschmer: Der Name der Lykier (in Kleinasiatische Forschungen 1 (1934) 1ff.

35. It now seems probable that the "Peoples of the Sea" had their main Asiatic centre in Miletos, and that the Carian coasts were occupied by the Lukka, in the thirteenth century (Garstang, op.cit.) Around 1300, the Lukka were allied with the Hittites against Arzawa (a confederacy based on Lykia with its capital at Kabessos= Antiphellos), but the Hittites then seem to have been alive to the danger of an Arzawan alliance with the Lukka. It seems clear from the later name of Lykia that the Lukka settled in Arzawa in force, presumably after 1300: the saga of Bellerophon reflects this change, for his activities are related to both Amisodaros of Caria and to Lykian localities; a legend presumably derived from the days of hostility between the Sea Peoples and Arzawa is the story that Idomeneus of Crete killed Othryoneus of Kabessos (Iliad 13.361ff).

This Milesian organisation of the thirteenth century is presumably the original of the Carian thalassocracy which Minos overthrew (sometime, therefore, before the rise of the Lydian sea-power). Since a Greek name for ancient Caria was Phoenicia, it is to be supposed that stories of Phoenician activity in the Aegean also refer to this Milesian power (there were "Phoinikes" in historical Miletos, of whom Thales was one), and that the name was applied to the Syrian towns when the Sea Peoples settled there about 1190. Kadmos will then be a representative of these Carians, not of the Syrians.

The Pelasgoi of the second thalassocracy should, according to Greek tradition and Lemnian archaeology, include people from both the Greek and Asiatic mainlands. The Achaian, Aiolic or Pelopid settlement in Lesbos, and the Pelasgian migration from Attika, will both have contributed, and so probably will a Tyrrhenian stock from Lydia or Mysia. Herodotus makes Tyrsenos, the eponym, a Lydian; others made him son of Telephos and Hiera of Mysia and brother of Tarchon: Telephos is the Hittite Telepinuš, Hiera is Išḫara, and Tarchon is Tarḫun: this Telephos is called king of the Ketoioi (Hittites) by Homer. It is particularly noteworthy that Telephos appears in Telephios Demos and Telephou Krene near Patara in Lykia, while Teukros' brother Trambelos of Lesbos can hardly be other than an eponym or homonym of the Trm̃mili of Lykia, and Tarḫun names are known from thirteenth-century Arzawa. Thus the traditions make the Teukroi, Tyrrhenes, and Trm̃mili kinsmen and related to the Hittites, and their Greek reinforcements are Pelasgoi from Attika (already invaded by "Amazons" and Teukroi) and others under the leadership of a Pelopid, himself of Lydian derivation.

It is a question why there is this confluence from Greece and Asia to the north-east Aegean at this period. The Greek answer about the Tyrrhenes was piracy: but they do not say on

what the pirates preyed. However, the stories of the kidnapping of Dionysus, and of the women of Brauron, suggest the slave trade. The question is then who bought the slaves, and against what commodities they were exchanged: the location of the Pelasgoi suggests that it was something coming from the Euxine. The worthwhile commodity at this period would be metals - from Alybe the birthplace of silver and the Chalybes who made steel, and the golden fleece of Kolchis - from the "Amazon-Kimmerian" coast. The growth of the metal trade about this time is reflected in the rebuilding of the "gate of the metal-workers" at Assur in the years after 934. It was probably too, in the period of the first two thalassocracies, that Armaš[36], the Hittite and Lydian god of the moon became Hermes, the god of thieving and trafficking, as well as of the more formal methods of communication between potential enemies which are carried out through heralds; and much of the "Phrygian" influence on Greek culture will belong to this time. In mainland Greece, the name of Bacchis appears at Corinth towards the end of the period, and Bacchos is probably the Lydian god Bakis; in the same generation Aipytos of Messenia[37] is homonym (and perhaps prototype) of Aipytos of Arcadia, a hero closely associated with the Arcadian Hermes (Armaš) and Hermes' mother Maia (of the Maiones of Lydia). It would appear

36. For Armaš of the Hittites, Armaś of Lydia, Armaz of Hellenistic Iberia, see Sturtevant ap. Kretschmer op.cit., and Goetze ap. A.I. Boltunova, Vestnik Drevnii Istorii x 2(1949) pp.228ff. Pelops the Lydian was said to have introduced the cult of Hermes to the Peloponnese, and the Pelasgoi his cult into Attika.

37. His son restored the Andanian cult (Paus.4.3.9) and may have been responsible for the worship of Hermes there.

therefore that by the later years of the Pelasgian thalassocracy Greece is no longer merely an object of slave-raids, but that

Corinth and Messenia at least are something of cultural provinces and trading partners of the "Pelasgoi": both command routes to the west, and we should probably infer that the frontiers of the slave lands had moved to the Adriatic, Italian, and Sicilian coasts.[38]

38. The Odyssey knows of the Sikel slave trade: 20.383, 24.211

The succeeding Thracian "thalassocracy" (c848) is heralded by a Thracian invasion of Bithynia: if the Muski are related to the Maša, and are old inhabitants of Asia, it will be these Thracians who bring the Phrygian name to Asia, and become the rulers of the old Maša of the Sangarios Valley. The "Amazons" were perhaps left to fight this enemy alone: the eastern states were faced with an expanding Assyria, reaching out for the Cappadocian mines, which she achieved in 836, while the state of Urartu was also beginning to form. The Asiatic metal supplies are thus diverted eastwards at the time when the Thracians are astride the western route, and we should suppose that Pelasgian trade rapidly declined: [illegible] and western exploration may have turned from slave-raiding to a search for metals. By 797, on this argument, the Rhodian thalassocracy, and Dotadas' port at Methone, are the Aegean results of Assyrian domination in Kilikia Pedia and Tyrrhenian exploration of the west.

V. PHRYGIA The absorption of the Thracians into their new Asiatic environment seems to have been rapid: the Phrygian transmuted date in the thalassocracy list appears at 784: it would seem that Phrygia and Urartu now begin to take the place of the older "Amazons and Kimmerians" as the western and eastern

representatives of the metal powers of Anatolia. Perhaps sometime about this date we should place the capture of 22 towns in coastal Kilikia by the Phrygians, recorded as having happened long ago by the Assyrians in 715: the coasts of the Phrygian and Urartian empires would then almost touch, in the neighbourhood of the Gulf of Issos. The record of this Phrygian thalassocracy may well be due to the Teukrians of Olbe, who lived on the main coastal route from the east into Phrygia: and this will be the time when everything that Midas touched turned to gold.

VI. CYPRUS. The transmuted Cypriote date is 768, and this thalassocratic generation sees the height of Urartian, and perhaps of Phrygian, power. Cypriote traders no doubt served both empires. The Greek town at Al Mina in Syria was founded about this time.[39]

39. Perhaps from Kilikia, if it was Poseideion, "founded" by Amphilochos.

VII. PHOENICIA. The rise of Phoenicia to thalassocracy at the transmuted date of 744, about the time when Assyrian ascendancy was re-established in Syria, suggests that what is meant is Phoenician exploration of the western Mediterranean in the wake of the Tyrrhenes from old Pelasgia, and the Kymaian Greeks who followed them. This suggests that Kastor's source believed that the Phoenicians learned their way from the Cypriotes (who include some Teukroi), and that their appearance as settlers in the western Mediterranean led the Chalkidians and Corinthians to establish the first Greek colonies, this development in its preventive aspect being the source of the tradition that the Greek colonists drove the Phoenicians out. In this connection

we should note that the Kanones give a foundation-date for Carthage only 13 to 17 years before the beginning of the Phoenician thalassocracy, while their earliest date for this colony is 15 years after the beginning of the Pelasgian thalassocracy and 6 years after Cumae. These dates rather suggest a dissimilation from an original tradition which associated the western Phoenicians with the earliest Greek colonies, and these with the Tyrrhenian exploration of the west.

VIII. EGYPT. With this entry we get out first definite external evidence for dating: the transmuted date is 718, and c716-12 is the true date for Bocchoris, whom the Greeks remembered as a trading king of Egypt, and, with his father, the first of which they knew from their own knowledge. This "thalassocracy" does not seem to imply an Egyptian maritime activity so much as a very firm control over the activities of Greek merchants in Egypt. The thalassocracy continues until about the time of Assyrian pressure on and conquest of Egypt.

IX. MILETOS. The transmuted date is 684, and the thalassocracy is short. It is contemporary with the first Messenian War, and may represent Miletos before Eretria lost the Lelantine war. See also pp 311ff.

X. CARIA. At the transmuted date of 671, this thalassocracy is contemporary with the rise of Gyges, whose ally Arselis of Caria carried off the axe which was an heirloom of the Lydian kings, and dedicated it to Zeus Labrayndos at Mylasa. The axe seems to have been carried by the Lydian Herakleids as a sign of their power over Lydia: its removal therefore amounts to an assertion of suzerainty. Later in Gyges' reign however he seems to exercise some power over the Carians.

Nothing more about Arselis is known: but he is a homonym of the Lykian god Arsalos, which suggests a generally highland rather than specifically Carian origin and environment. One incident in the Kimmerian war about the time of the death of Gyges or in the early years of Ardys was an attack on Sardis by Lykioi and Treres: this suggests an alliance between Arselis' followers and a section of the Kimmerian confederacy, which may explain why this thalassocracy lasts so long: Kastor was of Rhodes, and so would probably have access to considerable information on Carian affairs.

XI LESBOS. This is the last of the prehistoric or semi-historic thalassocracies: its transmuted date is 634, during the period when the Pontic colonies are founded, and after the Kimmerian disintegration. The Pontic colonies are largely Milesian, and much of the trade was in Rhodian hands in the early years. This constellation of states suggests the formation of a bloc exploiting the Pontos and Egypt as a counterweight to the Corinthian bloc exploiting the west and Kyrene. The second Messenian war will be a part of the struggle. Lesbian expatriates during this period are Arion, who is found in Corinth, and Sappho, who visits Corinth's colony Syracuse. Athens, a member of the Corinthian bloc, fights the Mitylenian War, and (?after a change of government in Lesbos) Corinth arbitrates.

The general conclusion from this treatment of the thalassocracy list is that Kastor drew on very good traditions, which were made coherent, probably at source, by the various Teukrian settlements which claimed kin with the Philaidai. So far as can be judged from the Rhodian and Egyptian entries in the earlier part of the list,

the distortion of dates is due only to the genealogical reckoning of 39 years to the generation, and such a distortion will not have occurred before the invention of the Chronographic Model in the fifth century, so that the generation-date of Rhodes must have already been fixed by then, as the generation-date of its Messenian partner is fixed by the name of Dotadas.

Before leaving the archaic lists, we may summarise the evidence from extrinsic sources for believing that the 25-year generation is the correct measure of time for this period:

1. Akrisios of Argos, who built the walls of Mycenae and Tiryns with the help of Kyklopes from Lykia, is now identified with Attrišŝyaš of Aḫḫiyawa, an associate of the Lukka of the Carian coast,[40] and the fortifications of Mycenae are dated to the second half of the thirteenth century.[40a]

40. Sturtevant AJSL 44 (1927/8) p.218

40a: either the whole wall (Daniel) or its extension - AJB Wace Mycenae p.132 ff.

3. His grandson Perseus fled from Argos to Tarsos, where he is archaeologically represented by the "squatters' level" in the twelfth century.[41]

41. Miss Goldman AJA ~~xxxxxxx~~ 41 (1937) 262 ff. cf Daniel p.283. Miss Goldman and CFA Schaeffer (Stratigraphie 264[4]) would prefer a date some 75 years earlier

6. Demophon or Akamas of Athens settled in Cyprus: on the dating proposed here, in the generation of 1075. Attic associations with Cyprus in the late Mycenaean period continue until about the end of the twelfth century.

10. The Return is dated here about 975: the archaeologists suggest 950.

15. The Thracian invasion of Asia and the decline of Pelasgia is here dated about 850. ~~xxxxxx

[illegible]. In the present state of Etruscan archaeology no evidence from the Tyrrhenian arrivals in Italy can decide between contiguous 25-year generations.

16. The second generation of the Thracian thalassocracy may be supposed to have included the growth of the southern sea-route which later produced the Rhodian thalassocracy. This is the generation of Sammuramat (queen-regent of Assyria 811-08) whom Greek tradition transformed into Semiramis, the wife of the "first" Assyrian king. Her name and fame probably arise from the circumstance that the Aegean Greeks (as distinct from those of Cyprus and Kilikia Pedia) first learned of Assyria in the generation before the Rhodian thalassocracy was established.

17. There is not sufficient agreement among the archaeologists to say in which 25-year generation the exports of Greeks pottery to the west begin.

19. For the dating of the first Sicilian colonies, see chapter 6. The Phoenician thalassocracy in the second half of the eighth century agrees with present opinion on the date of the Greek adoption of the alphabet. (The intermediary was not Cyprus, which had its own syllabary: the Kilikians were using Hittite hieroglyphs and Phoenician letters at this time.)

20. The Egyptian thalassocracy agrees with the true date of Bocchoris.

22. The Carian thalassocracy agrees with the true date of Gyges.

It would thus seem that where the generation count is correct, the 25-year generation is a suitable dating mechanism for 26 generations before the Persian wars, that is, back to the end of the thirteenth century, with, of course, rather more looseness in the first few generations.[42]

42. Recent work (e.g. Kahane, AJA XLIV, Dunbabin JHS XLVIII, Desborough BSA XLIII) on the Corinthian and Attic pottery now brings further information about the early monarchic period, which may be set forth with the literary evidence as follows (the datings make no claim to precision):

1100
1075 In this century the ProtoGeometric style is created in Attika — The Theseidai
1050
1025
1000 Melanthos and the Aigialeis. About this date there is evidence of Attic Pr/G influence in Ithaka. Cp. the story (Paus.1.37.6) that Kephalos of Attika went to Kephallenia and his descendants in the 9th generation came back to Attika. In this story, Kephalos is contemporary with Amphitryon (i.e. 1100), so that the 9th generation = 900, and Odysseus (son of Laertes son of Arkeisios son of Kileos son of Kephalos) = 1000 (Or with Kileos omitted as in one version, Odysseus = 1025 = Agamemnon.) This dating is presumably derived from the Attic pedigree of the Kephalidai.

975 Aiakos. Aletes at Solygeion
950 Peleus goes to Thessaly. Marmariani Pr/G under Attic influence about this date. Akastos the prototypical archon.
925 Teukros goes to Cyprus. Exported Pr/G skyphos in context of 926 B.C. in Palestine. Some exports to central Crete about this date.
900 Prymnis at Corinth. Perhaps now (and not earlier?) resettlement of Korinthos hill, i.e. first archaic Corinthian state form. Early Geometric. Return of the Kephalidai.
875 Corinthian Geometric influence first appears in Ithaka. Bacchis of Corinth. The independence of Megara.
850 Corinthian foundations of Perachora and Ithakan Aetos. Rhodos in Messenia founded.
825 A little Cycladic material in Aetos
800 The Messenian part at Mothone has now a context of mainland interest in the west, as well as direct Messenian contact with the Pr/G area at an unknown date, but presumably at least a century before this. Rhodian, then Phrygian, thalassocracies.
775 Second archaic state form at Corinth: the prytaneis. The Argive Althaimenes in Rhodes. Cypriote thalassocracy
750 "ProtoCorinthian Geometric". Colony at Cumae. Phoenician thalassocracy. Attic influence reappears in Crete.
725 Early ProtoCorinthian. Cypriote influence on Attic Geometric, and Attic export to Cyprus. Isis grave at Eleusis. Colonies in Sicily and Italy. Cretan and Cycladic material at Aetos.
700 Early ProtoAttic. Aischylos archon (and rise of his oikos?)
675 The decennials. Conquest of Messenia.
650 The later decennials.
625 The annual archonship at Athens and the tyranny in Corinth.

IV. The Mythical Dynasties of Greece

The surviving lists of the mythic kings of Sikyon and Argos-Mycenae are examined and chronographically analysed in Appendices VI and VII. These, together with the mythic portions of the Athenian list, comprise the chronographic tradition of pre-Herakleid Greek history.

The mythic lists are not amenable to anchisteia analysis, from which it is to be inferred that the named generations represent some other social form or forms. These, as I shall show elsewhere, are variants of divisional tribal organisation ancestral to the historical phratries and anchisteiai; but since the chronographers ignored the differences between the ancestral forms and the historical ones, there is no need to discuss the former here. We should however note that anchisteia generations are not found earlier than the beginning of the Herakleid genealogy, so that these mythic generations cannot be translated into archaeological quarter-centuries. The myths are consistent on this point, the only early non-Herakleid genealogy which seems to show anchisteian influence being that of the Pelopids, where the appearance of Pleisthenes between Atreus and Agamemnon suggests that there was an attempt to make a four-generation anchisteia out of the names of the Mycenaeans: 1.Atreus, 2.Pleisthenes, 3.Agamemnon, 4.Orestes. But this is no exception: Atreus belongs to the generation after Herakles at Mycenae, and his family therefore to the early post-Heraklean and anchisteian generations.

The mythology of these lists of ancient kings, in so far as it survives, is by no means without meaning for the historical

period: it represents the beliefs of the historical Greeks about their past. For instance, the close and intimate association of mythical Sikyon and mythical Athens could hardly have been so emphasized unless it represented some known and recognisable common factors between the two communities, partly traced back to the supposed Ionian migration from the Aigialos to Attika at the beginning of the archaic period. The inference is therefore that a number of Attic stocks believed themselves to have congeners in Sikyon, and in the field of ancestral legend and nomenclature this inference may be illuminating. For instance, the ancestor of the Sikyonian tyrants is said to have been a mageiros, a word which in its secular sense means butcher or cook. It is usually taken, with some surprise, to mean that in seventh-century Sikyon a person of the lowest freeman status (who was also a non-Dorian) could be a theoros at Delphi and become head of state, much like the demagogues of latex fifth-century Athens. Either this is impossible, or our notions of seventh-century Greece are hopelessly awry. But this inference is not necessary: in Athens the Mageiroi were also the Daitroi,[1] a priestly line of the Kerykid genos, participating in the Bouphonia, one of the most important religious celebrations in the Attic year. It is far more reasonable to suppose that Andreas

1. Cook, Zeus 3.585

was a member of a priestly genos or patria of the Aigialeis, a man of prestige, honour, and ancient family, in the political circumstances of the seventh century, than that he was a free tradesman of the lowest origins.

If any conclusion can be drawn from the anchisteian traditions to the historical value of the archaic lists, it is that any other method of criticism than that of social organisation in mythic times is likely to be secondary. We may investigate possibilities of archaeological correlation, such as that already suggested for Akrisios; but only one other instance offers itself in the present state of our knowledge. This is in the story that Phoroneus had a brother Kasos, who married Amyke Kitia, the daughter of Salaminios of Cyprus, and at the head of a boy of Cretans and Cypriotes settled in North Syria. This myth has been held to refer to the Mycenaean colony at Ugarit about 1400 B.C.,[2]

2. R. Dussaud Syria10 pp 297ff: for the date see Schaeffer Stratigraphie 10.

and if the correlation is correct, it emphasizes the fact that the pre-anchisteian generations have a different value, for from Phoroneus to Akrisios there are thirteen kings in less than 250 years.

A second critical method is to compare the mythic histories of two interacting communities, such as Sikyon and Thebes. These reveal many inconsistencies and variants, showing that the traditions did not develop within the framework of synchronous histories, but according to the requirements of the individual communities. All such mythic comparisons go to show that although a vast mass of mythic material has survived, it is only a small proportion of what once existed. We not only have no chronographic version of Pausanias' list of Sikyonian kings (which may not have been treated chronographically), but we also have no consistent mythology of the chronographers' lists; nor have we any account of why the chronographers believed that Sikyon provided the oldest of the mythic dynasties other than a Hesiodic allusion to an untold myth,

that the contract between gods and men was established at Mekone.

Thirdly, even in cases where the mythology is plentiful, the chronographers often follow an unknown version. Agamemnon lives on to reign 12 or 15 years after the fall of Troy; [illegible], and so forth. In the merely biographical details of the heroes there were, it is clear, stories that have not survived, and it may be suspected that many of these were political versions of the older myths, turning the heroes into statesmen with less melodramatic lives than the ancient myths described. The difference between the Agamemnon of Aischylos and the Agamemnon of Kastor is not without its parallels in the difference between the fundamentalist and folklorist views of the Old Testament - in other words, the development of our own mythology. No doubt Kastor's mythology seemed objective and commonsensible in his day.

The three surviving versions of the mythic chronographic dynasties are those of Kastor, the source of the Excerpta Barbari, and the source of the Syntomon. We have already seen some reason to believe that the Attic list of the Barbarus may be a pre-Apollodoran survival, while that of the Syntomon is probably an archaising variant of Kastor's version. Among the Argive lists, the Excerpta and the Syntomon are more closely related to each other than either is to Kastor: perhaps both are deliberate variants of a chronographic tradition in which the influence of Africanus appears. The periods of 72 and 75 years from Troy to the Return have no parallels in the literature: the first is due to an ancient corruption, the second to a

hybridisation of Apollodoran and Kastorian elements. The Excerpta and Syntomon have in common a use of long Hebrew chronologies, to which their Greek lists had to fit, and the source of the EB seems to have found a pre-Apollodoran Attic list suitable for his purposes. But the Syntomon for Attika, and both sources for Sikyon and Argos-Mycenae, seem to use lists which degenerate in form and periodisation: closed mythic systems for Argos-Mycenae take the place of Kastor's long historical view, while simpler historical concepts than Kastor's have moulded the EB list for Sikyon, and the Syntomon adapts what looks like a Kastorian derivative to an Apollodorising terminus. It would seem that the source of the EB (later than Africanus and Porphyrius though it is) was more closely associated with the Hellenic chronographic tradition, while the source of the Syntomon was later and more degenerate.

We have suggested in Appendices I and III above that the EB may preserve part of Kastor's Spartan list, and a pre-Apollodoran Attic list, as well as Kastor's Corinthian list. The source of the EB's lists for Argos-Mycenae and Sikyon is therefore of interest, in case they come not only from a source other than Kastor, but also from a source older than Kastor. This seems on the whole unlikely: it is far easier to alter an example in lists such as these than to provide one, and the differences seem to be in the direction of simplification based on a smaller knowledge of the myths and traditions than Kastor possessed, and simplification towards containment in neat periods

dated only to the best known chronographic epochs. Eusebius was prepared to suppose that the character of history changed abruptly in 776 B.C., and it is this simplicity of mind, rather than that of early chronography, which is found in these lists. They are probably among the latest products of the chronographic discipline to be produced before its principles were forgotten.

V. Chronography in Herodotus' Histories

The techniques of chronography and chronology are not to be superficially distinguished in Herodotus' work, since he employs methods of dating by numbered years, unnumbered generations, and dated generations. Moreover, his main narrative extends from the accession of Kroisos to the end of the campaign of 479 B.C., and his methods of reference back into the period before Kroisos are many. The enquiry therefore proceeds under the following heads:

A. Herodotean methods of references to the past

B. Years covered by the main narrative in each book

C. Naturalistic datings in the "embassy reports": Sparta

D. The Chronographic Framework in Book I

E. Naturalistic and chronographic datings in the "embassy reports" etc

F. The chronographic scheme and incidental notices

G. Book II: the impact of an alien system of historical time-reckoning.

A. Herodotean methods of references to the past: i. Books VII-IX

The simplest methods of time-reckoning, both for the main narrative and for back references, are used in Books VII-IX, which many believe, on other grounds, to have been the first work written by Herodotus. The main narrative proceeds by years, that is, the chronology is annalistic; the general historical framework is given by genealogies, (i.e. generations without numbers of years) of Xerxes (7.11: back to the phratric (1.125) eponym), of the Spartan kings (7.204 and 8.131: back to Herakles), and of Macedon (8.137: back to the founder of the monarchy). Generation dating is used to place Minos in relation to the Trojan War (7.171); and the only number of years mentioned outside the main narrative is the

century from the Dorian attack under Hyllos to the Return of the Herakleidai (9.26). References to the mythical or pre-Return period are frequent in the army list: Perses (7.61), Medeia (7.62), the Phrygian residence in Macedon (7.73, cp. 8.43, Dorians and Makednoi), the colonisation of Mysia from Lydia (7.74: not mentioned in Book I, but implied in non-Herodotean tradition, e.g. the appearance of a Tyrsenos of Mysia as the son of Telephos, and the famous silence of Xanthos about the Tyrrhenian migration from Lydia); the Mysian and Teukrian invasion of Europe via the Bosphoros before the Trojan War (7.20, 7.75, cp.5.13: not mentioned elsewhere in Greek literature); the settlement of Cyprus (7.90) by Athenians (i.e. Akamas and Teukros), Arcadians (i.e. Agapenor), men from Kythnos (not otherwise mentioned), Phoenicians, and Aithiopes (i.e. other Levantine peoples: Strabo mentions three Aithiop races, the Kephenes (the original name of the Persians, Hdt. 7.61), the Eremboi (either Aramaioi or men of Iarimuta in north Syria), and the "Pygmaioi"); Lykos of Athens (7.92). To these we may add references arising out of the route of the Persian army, to Athamas (7.197) and the Thessalo-Phokian war (7.176); and out of the fighting: to Dekeleia and Theseus (9.73).

Finally, there are incidental references to recent history, in speeches: the law of succession at Sparta (7.3), the Ionian revolt (7.8), Kyros and the Massagetai, Kambyses and the Aithiopes, Dareios and the Skyths (7.18), Chilon the ephor (7.235); notices by the historian in propria persona: Onomakritos (7.6), the Kimmerioi and Skyths (7.20), the Thessalo-Phokian wars (8.27); and two narratives arising out of embassies between Greek states: the Argive war of Kleomenes (7.148), and recent Sikeliote history

(7.153ff), including the two 7-year reigns of Kleandros and Hippokrates at Gela.

From the references in these three books alone, the reader of Herodotus would find a framework of generation-dating in the genealogies, from which with a general knowledge derived from Homer and Hesiod he could arrange the ethnogenetical and other notices in the army list in a relative temporal order; the remaining notices either fall within the generation preceding the war of 480 (the Ionian revolt, Onomakritos, the Thessalo-Phokian war, the Argive war, the Sikeliote tyrants), or within the last four generations (the Skythic pursuit of the Kimmerioi in the time of Kyaxares the Mede, Chilon the ephor in the time of Anaxandrides II of Sparta, the Persian campaigns against the Massagetai, the Aithiopes, and the Skyths), or are theoretically permanent (the law of succession at Sparta). Thus from the Return of the Herakleidai and the Thessalian migration, to the time of the Skyths and Kimmerioi, which is a space of about twelve generations, no events are named by Herodotus in these books, and problems of dating, other than by generations, of events outside the main annalistic narrative do not arise.

ii. Books III-VI

In Books III to VI the main narrative runs from the accession of Kambyses to the Parian expedition, and the method of dating is incompletely annalistic, for the various series of events are connected, but the intervals between these series are not noted, e.g. the interval from the accession of Kambyses to the invasion of Egypt, from the fall of Babylon to the Skythian expedition, from the fall of Lemnos to the Naxian revolution.

These main omissions are different in kind from confusion or obfuscation in the dating within connected series of events, such as the Ionian revolt or the Aiginetan wars, for the large omissions belong to the chronological framework of the history. We shall see in section B below that a single reason may be given for all three instances in Herodotus' misunderstanding of his eastern sources.

In Books III-VI Herodotus goes outside his main narrative in the following instances:

III 39ff, 120ff: Persian relations with Samos form the occasion for references to Samian affairs under Polykrates and "a generation earlier", and two notices of still earlier events, the Messenian (3.47) and (probably) the Lelantine (3.59) wars, which are undated.

It is noteworthy that the opportunities for a review of Sikeliote and Italiote history (3.136ff) and Mesopotamian history (3 ad fin) are not taken in this Book.

IV 1 ff adds the Skythian royal genealogy (4.76) and a number of ethnogenetical notices, with one date: the Skythic nation was formed 1000 years before the expedition of Dareios (4.7). An anecdote preserves the date of the founding of Kalchedon 17 years before Byzantion (4.144)

V 145ff gives the foundation-legend of Thera, with a generation date at the beginning of the Spartan dyarchy, and related to the settlement of Kadmos in Boiotia, and the Argonautic expedition as well as the Minyan settlement in Lepreatis: with a note of the Elean

conquest "in my day" (4.148)

IV 149ff gives the genealogy of the Kyrenaian kings, with the notices Battos I: 40 years, Arkesilaos I: 16 years, and the synchronisms Battos II and the fall of Apries; Arkesilaos III, Kambyses (525-2 in Egypt) and Euelthon of Cypriote Salamis; together with the statement that the Persian capture of Barke occurred at the same time as the Skythian expedition.

The Eusebian date of 631 for the foundation of Kyrene is directly derived from the Herodotean narrative thus: Kambyses' accession 529: 44½ years to the accession of Amasis, in 574; last year of Apries, 575; 56 years to the accession of Battos I: 631 B.C. The two weak links in this sum are (1) the identification of the first Persian and first Egyptian years of Kambyses, and (2) the identification of the last year of Apries with the first year of Battos II: but these two weaknesses almost cancel each other out: assuming the 56 years of the first two kings, and 570 for the "last" year of Apries, the latest possible dates are 625 for Platea, 623 for Aziris, and 617 for Kyrene.

The other dates for Kyrene are 760 (Eusebius) and 598 (Solinus). The second of these seems to be due to a misapprehension: the date is given both in Olympiads and as in the 586th year after Troy. But since 585 = 39 x 15, Solinus was probably drawing on a source interested in the Battiad genealogy, and this was not necessarily a source which accepted the Eratosthenic date for Troy. In fact 631 plus 585 = 1216, a date near the Marmor Parium and the Excerpta Barbari; while 760 plus 585 = 1345, the date accepted by Delphi and the Lokrians in the fourth century. The date of 598 may therefore be dismissed as a fiction.

The existence of 39-year reckonings in the chronography of Kyrene suggests that the date 760 is derived from a similar count for the Battiad dynasty. Since this comprised 8 generations, the suggestion is that 760 = 448 plus 39 x 8, so that 448 would be the first republican year of Kyrene, and 449 the last year of the Monarchy. Then the tradition that the dynasty lasted 200 years would give the dates 648-449, so that 570, the "last" year of Apries, would fall in the 23rd year of Battos II.[1]

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1. The dynasty of Kyrene is not well dated; the available information is:

Battos I (40 years):	acceded	at	latest	625
Arkesilaos I (16):	..	..	..	585
Battos II:	..	..	..	570

Arkesilaos II: the foundation of Barke
Battos III: constitution of Demonax
Arkesilaos III: reigning in 525
Battos IV
Arkesilaos IV: reigning in 462

The late date for the foundation, i.e. between 650 and 625, places it in the same generation as the (Apollodoran and vulgate) dates for the Second Messenian War: the generation-date (15 after Troy) gives the generation of Polydoros on the long Spartan list and that of Anaxandros on the short, i.e. it varies between the generations of the first and second Messenian Wars. The 585 years after Troy and the date of 760 B.C. may thus belong to a single tradition, and if they do, they are of the highest interest as implying the existence of the long Spartan list in a source which disagreed with Kastor about the date of Troy: the candidate is Douris of Samos, who is said to have placed the fall of Troy in 1335/4: the beginning of the war would then be in 1345/4, the Delphic and Lokrian date accepted in the fourth century, reported (and perhaps shared) by Timaios, whose Korkyra is founded 600 years after Troy. These various hints suggest that the east Greek view of the order and relative age of events in the heroic age was rather different from that current in the mainland: cp. the story that Herakles' mother Alkmene was the daughter of Amphiaraos - another Samian assertion, by Asios.

The margin of error in the dates 650-25 is important in relation to other events of the period: the colony seems to be earlier than, of founded in the early years of, the second Messenian War; a few years earlier than the beginning of Phokaian voyages to Tartessos (c620- beginning of the "reign of Arganthonios" Dunbabin p.339), and contemporary with the Tartessian voyage of the Samian Kolaios. These events then seem to have the following context, important both for general Greek

history of the late seventh and early sixth centuries, and for Corinthian development in particular.

650-40 Rhodian exports to the west start again
640-25 .. ..increase
c634 Thalassocracy of Lesbos, friend of Miletos and enemy of Corinth and Athens, based on trade with the Thracian and Pontic colonies founded as the Kimmerian confederation disintegrates. Rhodian trade with these colonies.
c625 Theraioi at Platea. Voyage of Kolaios of Samos to Tartessos
c625-09 Second Messenian War
625-00 Rhodian exports to the west increase
c623 Theraioi at Aziris
c620-10 Foundation of Kyrene, on Delphic insistence (= Corinth). This area was probably already known to the Samian traders, for Kolaios calls at Platea, and by 525 an inland settlement of Samians "of the tribe Aischrionis" (and so not a polis, but a private settlement) existed at Oasis: this may have originated much earlier (Hdt. 3.26) Foundation of Naukratis from Ionia and Aigina, regularising a traffic which began c718 under Bocchoris Phokaian voyages to Tartessos begin
c616 Kypselos' tyranny begins in Corinth
c610-00 Corinth admits Athenian pottery to Etruria
c600-575 Corinth admits Athenian pottery to S. Italy
Pheidon of Argos: Arcadia, Sikyon, Elis, Aigina
Poverty in Sparta
Corinthian pottery appears in the Pontos: Athens fights Lesbos
c590 Phokaian colony at Massilia
c586 Corinthian rapprochement with Miletos
c580 Athenian pots in Sicily
c574 Rhodian colony at Akragas: Pentathlos at Lilybaion
Phokaian thalassocracy succeeds that of Lesbos
"Lykourgos" in Sparta

The period of the Lesbian thalassocracy thus sees the opening of the Pontos, Egypt, Kyrene, Gaul and Tartessos to regular Greek trade, which properly coincides with the abandonment of monopolies by Corinth and Miletos, and the full establishment of the Greek form of market economy.

V 28 preserves a notice of two generations of <u>stasis</u> in Miletos

(before the tyranny of Histiaios, which is established by

the time of the Skythian expedition)

V 39ff: the account of the visit of Aristagoras to Sparta includes a review of Spartan history from the time of the last visit of Kroisos' messengers (1.83), omitting the Samian expedition (3.39ff). The narrative deals with the accession of Kleomenes and the expedition of Dorieus.

V 55ff: the account of the visit of Aristagoras to Athens includes a review of Athenian history from the time of Kroisos' embassy (1.59ff). The narrative comprises the murder of Hipparchos and the gentile history of his murderers; unsuccessful and successful attempts to expel Hippias; the Kleisthenic revolution, the Spartan expulsion of Kleomenes (with a note on the Kylonians), and that of Kleomenes and Isagoras; the attack by the Peloponnesian League and its allies on the democracy, and the quarrel of Kleomenes and Demaratos; the subsequent attacks by Thebes and Chalkis; the Spartan attempt to restore Hippias and a Corinthian speech on Kypselos -who reigned 30 years - and Periandros); the medism of Hippias.

V 113 refers to Solon's praise of Philokypros of Soloi, father of Aristokypros, killed in the Persian reconquest of Cyprus.

VI 31ff: history of the Philaid principality in the Chersonese

VI 51ff: Dareios' heralds and medism of Aigina; Demaratos of Sparta; origins and race of the Spartan dyarchs; deposition of Demaratos; the Aiginetan hostages; deposition, restoration, madness and death of Kleomenes: his Argive war, the Skythian embassy; Aiginetan reprisals on Athens: the subsequent war.

VI 103f. more Philaid history (occasioned by Miltiades' command at Marathon)

VI 108: the Plataian alliance (occasioned by the presence of Plataians at Marathon)

VI 121ff: Alkmeonid history (occasioned by the imputation of medism at Marathon)

VI 137ff: the Pelasgian settlement in Lemnos (occasioned by the death of Miltiades, the conqueror of Lemnos).

Thus in these four books the references to events outside the framework of the main narrative are introduced by (1) Persian expansion (Samos, Skythia, Kyrene) and reconquest (Milesian stasis, Solon in Cyprus, the Philaid Chersonese); (2) the missions of Aristagoras (Dorieus, Kleisthenes) and the heralds of Dareios (Demaratos, Aigina); (3) four occasional notices arising out of Marathon and the obituary of Miltiades. In the first group, the dating is by generations, and years are given for the first two kings of Kyrene; in the second group - the "embassy reports" - the events ex hypothesi (a) fall between the embassies from Kroisos and the mission of Aristagoras, and (b) follow the visit of the heralds of Dareios; in the third group, the dating is again by generations.

The range of recent events covered by these books outside the main narrative is thus much greater than in Books VII-IX, and a greater chronological control is achieved when the accounts are dependent on Persian history and the "embassy reports". The remaining notices are dependent only on generations, as in Books VII-IX.

(3) The time-reckoning techniques in Book I are a great advance in precision. This Book adds the genealogies of Media and Lydia, and the generations are dated. Pre-Persian Mesopotamian history, however, is still reckoned in generations. The chronographic scheme in this Book (examined in detail below) supersedes the genealogical scheme of Books VII-IX. The "embassy reports" given to Kroisos deal almost entirely with the immediately contemporary situation in Athens and Sparta. The interview (and synchronism) of Kroisos and Solon serves as the ethical introduction to the Histories at large.

(4) Book II discusses Egyptian historical time, and chronographic methods in general. It will be examined in detail below; but the contrast with the assurance of the chronography in Book I is marked, and suggests that Herodotus had not by any means said his last word on historiographic technique when his work reached the stage in which we have it.

B. Years covered by the main narrative

From Book V.28 onwards the main narrative in Herodotus is annalistic: Book V covers the years 500-496, Book VI 496-489, and Books VII-IX the years 489-479. In Book I a continuous chronographic framework, in dynasties and reigns, covers the years 1228-530 (see further below). There are however some difficulties in Herodotus' presentation of the main narrative in the years 529-01, which may perhaps be elucidated now that the true dates of many of the events he mentions are probably known.[2]

2. See A. Poebel AJSL 55(1938) 130ff, 142ff, 285ff, W.H. Dubberstein ib.pp.417ff; Poebel AJSL 56(1939) pp 121ff; R.A. Parker AJSL 58 (1941) pp 285ff; G.C.Cameron ib.pp.314ff, Parker ib. pp.373ff: and contra, Olmxstead's arguments.

i. The reign of Kambyses

According to our non-Greek sources, Kambyses was made king of Babylon by Kyros at the New Year in April 530; during September the news of Kyros' death reached Babylon and Kambyses succeeded to his father's throne, so that September 530 to March 529 is his Persian accession year, and his first year begins in April 529. It was during his first Persian year that his brother Bardia was killed. The Egyptian conquest belongs to his fifth Persian year; and after it the Egyptians used Kambyses' regnal years for dating, either simply taking over the Persian regnal years, or having a reckoning of their own: Psammetichos III was disregarded, and Kambyses' first year was the remaining portion of the year in which Amasis died (526), so that Kambyses conquered Egypt in his "second" year, 525.

The pseudo-Smerdis revolted in the last month of Kambyses'

seventh year (on March 11th, 522), ruled for the first six months of Kambyses' eighth year, and was killed in the seventh month of that year on September 29th, 522.

In the reign of Kambyses, Herodotus has a different order of events, for Smerdis is killed after the conquest of Egypt; that is, Herodotus, like many Egyptians, has identified Kambyses' first Persian and first Egyptian years, so that the conquest of Egypt and the attack on Ethiopia fall in 529 before the death of Smerdis. This identification explains why Herodotus does not state the interval between Kambyses' accession and invasion of Egypt, for he believed there was no interval. The same identification occurs in the dating of the foundation of Kyrene to 631 B.C., as we noted above.

This dating has consequences for Herodotus' Samian narrative. The enemies of Polykrates will be sent to Egypt, return and fight with Polykrates, and go to Sparta in 529; the Spartan siege of Samos will belong to 528, the Samian attack on Siphnos and their purchase of Hydrea to 527, their five years of residence in Kydonia to 526-2, and their destruction by the Aiginetai to 521. For a possible true dating of these events, see below.

ii. The early years of Dareios

According to our non-Greek sources, Dareios killed pseudo-Smerdis on September 29th, 522, and his accession year lasts from then to March 521. Babylonia revolted by October 3rd, 522, under a pretender who claimed to be Nebuchadnezzar III: he was defeated by Dareios on December 18th, 522, and Babylon was taken. While Dareios was in Babylon, Media revolted, and was put down in

April 521; in May and June the Persian armies defeat Armenian rebels and await the coming of Dareios, who does not arriave. During July, Babylon revolts again, under another pretender also claiming to be Nebuchadnezzar III: it is againcaptured on November 27th, 521. The two reigns of Nebuchadnezzar III are reckoned in Babylonia as his accession year and first year respectively, the reign ending in the eighth month of the first year.

Herodotus brings the short reign of pseudo-Smerdis into the monadic year-reckoning by the simple expedient of making his seven-months reign the last seven months of Kambyses eighth year, instead of the last month of his seventhyyear, and the first six of his eighth. Herodotus thus omits Dareios' accession year, and makes him accede at the beginning of his first year, 521. To this year he then assigns the beginnings of three trains of events, (1) the disloyalty of Oroites, leading to the adventures of Demokedes, (2) the appeal of Syloson, leading to the Samian affair, and (3) the revolt of Babylon.

α. Oroites and Demokedes: According to the Herodotean narrative, Oroites was disloyal during the reign of Smerdis and while the Medes held the empire: on the true dates this is from March 522 to April 521, i.e. to the first month of Dareios' first year. Oroites' execution then follows, and his property is sent to Susa, where his slave Demokedes rises to favour by treating Dareios' sprained ankle. This illness of Dareios may perhaps be associated with the fact that Dareios did not proceed to Armenia where his generals were awaiting him during May and June 521, and since the Babylonian revolt began in July, we may place the despatch of

Demokedes to Italy, and the sending of Otanes to replace Oroites, during these months. The adventures of the Persian escorts of Demokedes will then fall during the siege of Babylon in Herodotus' account.

β. Otanes and Maiandrios. Otanes will leave Susa in June-July 521 and arrive in Sardis for the winter. His work there, and negotiations with Maiandrios will occupy 520, and Maiandrios will arrive in Sparta in the first (chronographic) year of Kleomenes, 519: the Persian sack of Samos will belong to the same year, and this will be the dating taken by Jerome's source for the thalassocracies, who made the Samian end in 520.

γ. Babylon. The siege of Babylon, according to Herodotus, lasted nineteen months, and the town was taken in the twentieth. Herodotus here seems to be using the Babylonian reckoning of the reign of Nebuchadnezzar III, of accession year plus eight months of the first year. His omission of the ~~xx~~ Nebuchadnezzar of the accession year of Dareios(522) follows from his omission of Dareios' accesion year itself, so that the reign of Nebuchadnezzar III is dated too late, beginning in (July of) Darieos' first year, and ending in (February, the eleventh month) of his second year.

δ. date of the Skythian expedition. Dareios made in all three campaigns against the Skyths, of which the European was the last. The first, against the Caspian tribes, was in Dareios' third year (519/8). Since Herodotus has no note of time between the fall of Babylon and the Skythian expedition, it seems that he has given the date of the first campaign to the events of the third.

ε. date of the Libyan expedition. This is borne out by the

fact that Herodotus dates the Libyan expedition of Aryandes to the same time at Dareios' Skythian expedition. Aryandes was appointed by Kambyses, and revolted on the accession of Dareios; Dareios had reduced Egypt by his fourth year. The Libyan expedition of Aryandes then belongs to 519, and Dareios' arrival in Egypt to late 519 or early 518; the message of Aryandes calling his forces home (Hdt. 4.203) will be due to his receiving news of Dareios' approach, and on his arrival the Barkaian prisoners (4.204) will have been taken over from Aryandes' forces and sent to Baktria.

5. Events after the Skythian expedition: With the Skythian expedition dated to 519, the same year will see the transportation of the Paionians, the embassy to Macedon, and the recall of Histiaios. The appointment of Artaphernes and Otanes to their western posts will begin in 518. The succeeding period of respite from suffering in the Aegean will then last from 517 to 501 inclusive. This Herodotus calls (5.28) "no long time": he does not give the number of years, probably because his Persian dates did not agree with the interval as known to Aegean sources. These latter are represented by CIG IV.6855, which dates Dareios' European expedition to the spring of 513, six years later than the Herodotean date.

6. Possible true dating of Samian history. When the true date of Kambyses' Egyptian expedition is taken, the Samian history begins in 525, the Spartan siege is in 524, the fall of Siphnos in 523, and the Samian settlement in Kydonia in 522. The disloyalty of Oroites belongs in the true dating to the year 522, which will therefore be the year of the death of Polykrates and the accession

of Maiandrios: the appeal of Syloson to Dareios and the despatch of Otanes will be in 521: his negotiations with Maiandrios will occupy 520, and Maiandrios will be in Sparta in 519. It will be after the rejection by Sparta of Maiandrios' appeal that the Aiginetai destroy the Samians in Kydonia in 517. This is the last year of Samian "thalassocracy" according to Kastor.

The discrepancy between his Persian and Aegean dates for the Skythian expedition seems therefore to have prevented Herodotus dating the period of peace in the Aegean, and he met the difficulty by the phrase "no long time". It is also to be noted that by reckoning backwards from the Skythian expedition dated to 513, the arrival of Maiandrios in Sparta would also be about that year, so that Kleomenes' accession would not be placed earlier than 514, when Dorieus left Sparta. This alternative reckoning may account for Herodotus' comment that Kleomenes reigned "no long time", for a reign from 514-491 would be of 24 years, less than two-thirds of a Spartan generation.

We may therefore summarise Herodotus' dating in this period:

1st year of Kambyses: conquest of Egypt, Ethiopian expedition, death of Smerdis (Persian first year = 529, correct for Smerdis; Egyptian conquest 525: Herodotus' error due to Egyptian reckonings)
8th year of Kambyses: last seven months, pseudo-Smerdis. Error due to translation into monadic years.
accession year of Dareios: omitted
1st year of Dareios: execution of Oroites and its consequences
despatch of Otanes and its consequences
revolt of Babylon dated by duration of reign of Nebuchadnezzar III: extends nearly throughout Dareios' second year. (Error due to omission of Dareios' accession year.)
3rd year of Dareios: Skythian expedition (first identified with third)
Libyan expedition of Aryandes

Thus on Herodotus' datings, Book III covers the years 529-19, Book IV the year 519, and Book V extends from 519 to 496 B.C.

C: Naturalistic Dating in the "embassy reports": Sparta

Since Herodotus was able to use the existence of kings at Sparta for generation dating at any period touched upon in his Histories, his problems of dating were different in this case from those of the other Greek states. It will be useful therefore to examine his treatment of Spartan history in some detail, and discuss his methods of dating.

1. The "embassy report" to Kroisos: 1.65ff

At the time of the embassy the Spartans had escaped from great evils and already been victorious over the Tegeatai. For, in the reign of Leon and Agesikles the Spartans, fortunate in other wars, were unsuccessful against the Tegeatai. At a still earlier period, they had been the worst-governed state in Greece: but a notable citizen, Lykourgos, with the blessing of Delphi, had made a new system of laws. The Spartans said however that Lykourgos brought the laws from Crete, when he was guardian of his nephew Leobotes: the laws were completely changed, and so also the military organisation, and the administration in the Gerousia and Ephorate. After a short period of quiet, the Spartans marched out against Arcadia, and were defeated, and many captured, in Tegeatis: indeed, throughout this early was with Arcadia they were defeated. But, in the time of Kroisos, and of their kings Anaxandrides and Ariston, the Spartans secured the bones of Orestes, and beat the Tegeatai; by the time of the embassy they were masters of most of the Peloponnese.

a) The general context of the Lykourgan reorganisation in Herodotus is that of wars against Arcadia: Apollodoros tells of an "elder Lykourgos" associated with the Tegeate wars ascribed to Charilaos;

and a "younger Lykourgos" contemporary with Theopompos, and therefore the first Messenian war.

b) No other source associates Lykourgos with the Agiad Leobotes, who is ten Herodotean generations before Leon. All others make him the uncle of the Eurypontid Charilaos, who in Herodotus is the son of Eunomos, and eight generations before Leon.

c) Herodotus contrasts the Spartan story, in which Lykourgos is uncle of Leobotes and brings his laws from Crete, with the anonymous source, in which Lykourgos is a notable (merely), and receives his sanction from Delphi.

d) Lykourgos belongs to a "still earlier period" than the war in the time of Leon and Agesikles; but this war follows upon a "short period" of quiet after the reforms. The longest short period in Herodotus is the 24 or so years of Kleomenes' reign after the departure of Dorieus; consequently the Lykourgan reforms would seem to be in the early years of Leon and Agesikles, and the Arcadian defeat in their later years.

e) Herodotus includes the name of Eunomos in the Eurypontid genealogy. This may be taken to imply that the Eurypontid tradition of Lykourgos already existed, although Herodotus does not notice it. Thus, by the time of Herodotus, three accounts of Lykourgos already circulated; later, the one he does not use became dominant.

f) The evidence from the Eurypontid genealogy for changes in the laws of succession in the reign of Agesikles (which are probably to be associated with the Lykourgan reorganisation) was already overgrown in the time of Herodotus, who make Archidamos the grandson of Theopompos, and a king. This version agrees with the law of

succession put into the mouth of the exiled Demaratos, and both the genealogy and the law probably come from one source.

ii.Spartan relations to Kroisos: 1.69-70,82-3

Before the alliance, Kroisos had sent as a gift some gold the Spartans had intended to buy from him. The alliance sought by Kroisos was willingly concluded by the Spartans, and they were ready to come upon his summons. Furthermore, they had made a large bronze bowl as a gift, and despatched it to Sardis: when its carriers reached Samos then (according to the Spartans) the Samians stole it; or (according to the Samians) the carriers learnt Kroisos had already fallen, and sold it in Samos, where it was dedicated to Hera. At the beginning of the siege of Sardis, Kroisos sent for help to Sparta, [illegible] then engaged in the conquest of Thyrea. The Spartans nevertheless prepared their fleet, but the news of Kroisos' fall arrived before they sailed.

a) The gift of gold from Kroisos to Sparta falls within 14 years of the capture of Sardis according to the Herodotean dating of Kroisos. The years which Herodotus attributes to Kroisos are 567-554 (see below).

b) The war of Kroisos and Kyros in the narrative of Herodotus does not seem to cover more than one campaigning season, which will thus fall in the last year of Kroisos. The campaigning season was, as ordinarily imagined, over before the siege of Sardis began, for Kroisos had already sent heralds to his allies asking for help in six months' time (1.77). On the Herodotean dating therefore, the campaign of Kroisos in Cappadocia, and the Spartan campaign in Thyrea, occupy the year 554 (see below); and the conclusion of the alliance will belong to the previous year: the bowl is ordered in 555, and lost in 554.

c) These events take place in the reign of Anaxandrides II, with the possible exception of the gift of gold from Kroisos, which falls before the Herodotean year 555.

iii. The Spartan warning to Kyros 1.152-3

Immediately on the fall of Sardis, the Ionians and Aiolians ask to become subject allies on the same terms as they paid to Kroisos (1.141). Kyros gives notice of harsher terms; and the Ionians and Aiolians appeal to Sparta. The Spartans refuse military aid, but send Lakrines to Sardis, to warn Kyros not to molest Greek cities. Kyros leaves Sardis, and postpones operations against the Ionians.

a) This mission of Lakrines is clearly imagined by Herodotus as happening in the first Lydian year of Kyros, which is, in his reckoning 553 B.C. (see below)

iv. The Samian affair: 3.39ff and 120ff

While Kambyses (529-2) was campaigning against Egypt, the Spartans sent a force to Samos against Polykrates: the Samians say their reason was the alliance in the Messenian War; but the Spartans say it was because of the theft of the Kroisean bowl, and that, a year earlier, of Amasis' corselet.

a) The theft of the Kroisean bowl belongs to the Herodotean year 554; the sending of the corselet by Amasis therefore belongs to 555.

b) Herodotus' year for the conquestion of Egypt by Kambyses is 529 (=525), so the date is 528 (=524) for the Spartan campaign against Samos. We have already seen that Samos fell to the Persians in 520, and Maiandrios was in Sparta by 519. The rejection of his suit by Sparta is followed in 517 by the Aiginetan destruction of the Samian settlement in Kydonia, and the rise of Sparta to "thalassocracy" in 516.

v. Herodotean information on the external relations of Sparta in the reign of Anaxandrides II.

The events mentioned by Herodotus, in chronological order, are:

the acquiring of the bones of Orestes
success in the Tegeate war
mastery in the Peloponnese
(555) alliance with Kroisos =547
gift sent by Amasis and stolen by the Samians
(554) bowl stolen by the Samians =546
campaign in Thyreatis against Argos
(553) Lakrines in Sardis =545
(528) Spartan campaign against Polykrates of Samos =524

The wider implications of this purely Herodotean account are considerable, for it is after Sparta has acquired leadership in the Peloponnese that she begins to develop a foreign policy in alliance with Lydia, and the implied alliance with Amasis of Egypt. The Egyptian association, which Sparta shared with Samos (under Polykrates) and Rhodes, suggests that more was afoot than merely the alliance with Lydia would imply: Sparta is leading the mainland states into entanglements with Asiatic politics on the side of the enemies of Persia: the conquest of Media, i.e. upper Asia as far as the Halys, is already complete, and Kroisos is allied with Babylonia. The alliance thus consists of Babylon, Egypt, Lydia, Rhodes, Sparta and her allies (but not yet Samos).

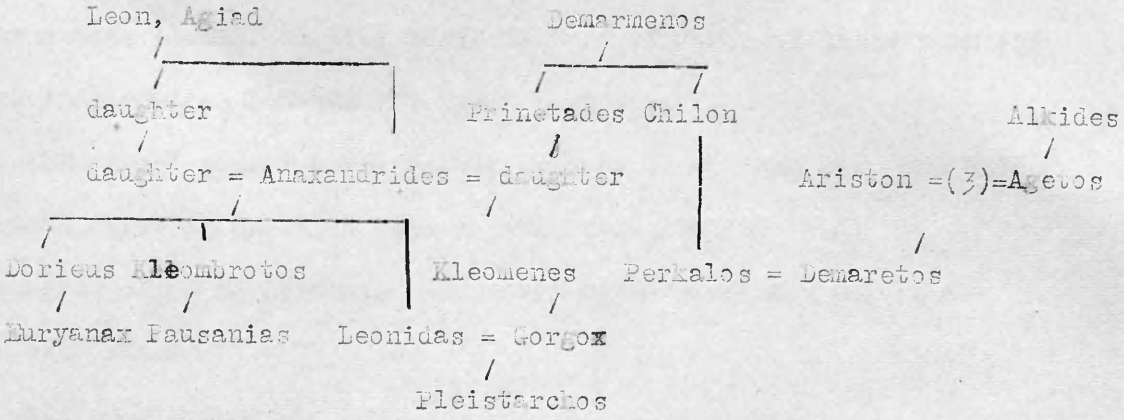
The attack on Argos and conquest of Thyreatis belong to this context, for they make Kythera safe for Sparta, and so secure her communications with Lydia and Rhodes.

The Persian conquest of Lydia was followed by negotiations with Ionia and Aiolis: the Spartans refused military assistance but gave diplomatic help. In the succeeding developments of the Lydian revolt and the conquest of the Asiatic Greeks, however, Sparta takes no part, and her abstention is not mentioned by

Herodotus, who ignores Spartan external history down to the Samian campaign. Other sources know the reign of Anaxandrides II as the time of the influence of Chilon the ephor and the putting down of the tyrannies of the Peloponnese. Since Sparta's interests at this period are on a world ~~xxxix~~ scale, we should also bear in mind the restriction of Greek western interests by Carthage, which affected especially Greek communications with Spain and Etruria: the simultaneous operation of large changes in both east and west no doubt resulted in changes of policy and organisation within the Greek states, and the putting down of the tyrannies suggests that Sparta's part in these internal changes was active and formative. She cannot, for instance, have been uninterested in the reorganisation of Kyrene by Demonax of Mantineia during this generation, and the attack on Polykrates follows on his desertion of Egypt and attachment to the Persian ~~Marian~~ cause. (The western interests of Sparta at this time are represented by the incident of sending the Dioskouroi to Lokroi probably in the decade 550-40: Dunbabin pp 356ff.)

vi. Dynastic problems in Sparta in the generation of Anaxandrides II

From various notices in Herodotus, the following relationships over four male generations of the Spartan dyarchy may be compiled:



Known dates in the lives of these people are the following:

1) Euryanax and Pausanias first appear in the command at Plataia in 479 B.C.

2) Kleombrotos dies after the eclipse in October 480

3) Gorgo was 8 or 9 years old when Aristagoras was at Sparta in 499: she was thus born about 508 B.C.

4) Leonidas died at Thermopylai, and his death marks the end of Kleomenes' generation. This generation is dated by the chronographers at 519-481, that is, Leonidas' death theoretically occurred on a New Year's Eve at Midsummer, B.C. 480 in our notation.

5) If Pleistarchos was born by 481, and died (unmarried?) in 459, hsi mother would be about 27 when he was born. But (1) other sons may have died in infancy, (2) there may have been daughters, (3) elder sons born before Leonidas' accession may not have been in the line of succession.

6) Euryanax may have been born before Dorieus first left Sparta about 514 B.C.

From these a number of inferences may be permissible:

a) The grandchildren of Anaxandrides were being born 515-08, so his sons (who were much of an age) would be born about 540-35 or earlier. Anaxandrides' second marriage would then be about 541, and his first

about 545: Leon's daughter would then hardly be born later than 577 and Anaxandrides himself not later than 565.

b) Kleomenes' mother would hardly be born later than 557, and her cousin Perkalos may have been considerably younger (e.g. the youngest child of Chilon). These approximate datings may then be set forth:

c 578: Leon's daughter born
c566 : Anaxandrides II born: Leon king at this time
c556 : Kleomenes' mother born
c540 : Kleomenes born: Anaxandrides king at this time
c539 : Dorieus born
c537 : Leonidas born
c536 : Kleombrotos born
c515 : Euryanax born (Dorieus aged 24)
c508 : Gorgos born (Kleomenes aged 32)
c481 : Pleistarchos born (Gorgos aged 27)
481 : Leonidas died (aged 56)
480 : Kleombrotos died (aged 56)
479 : Pausanias and Euryanax in command at Plataia (aged 36)

The family of Demarmenos, which contracted important dynastic marriages, was clearly of dominant importance in Sparta during the reign of Anaxandrides; and contains the name of Chilon at the time of the power of the ephor Chilon, son of Demagetos. The tradition of the ephor is scrappy and unsatisfactory, containing the following elements:

1) notices of policy:
he and Anaxandrides put down tyrants (Rylands Pap. 18)
he would "yoke the ephors with the kings" (?Sosikrates, ap. D.L.1.68)
he was interested in the security of Kythera (Hdt. 7.235)
he warned Hippokrates, father of Peisistratos, against his son (Hdt.1.59)

2) chronographers' dates:
one of the seven wise men: 586
an old man in Aesop's time: 572
the first ephor, in 556 (Sosikrates)
ephor in 760 (Pamphile)

Three strands of tradition may be unravelled in these notices:

a) the importance of his ephorate has been transmuted into his

initiation of the ephorate, whence Pamphile's date of 760 B.C. (the time of the founding of the ephorate by Theopompos and the "younger Lykourgos"); and Sosikrates' statement that Chilon was the first ephor.

b) his generation date is "contemporary with Anaxandrides" and therefore with Kroisos, and so with Solon and the seven wise men, among whom was Periandros, the contemporary of Aesop. Peisistratos belongs to the generation after Solon, so Chilon is contemporary with Hippokrates, and the warning serves as the title deed for the expulsion of Hippias.

c) his interest in Kythera connects him with the capaign in Thyreatis, in the last year of Kroisos: this is the only non-chronographic indication of date.

The argument from contemporancity of generations led the chronographers away from Sparta to Lydia and Athens, so that in spite of the tradition of Anaxandrides, Chilon the ephor appears to have reached old age by the time of Leon: he thus becomes a candidate for the place of the father of Demarmenos (so Macan). But his association with Anaxandrides seems to be primary, and we should probably conclude that Chilon the son of Demagetos is a double of Chilon the son of Demarmenos, who is genealogically the elder contemporary of Anaxandrides, his niece's husband.

The policy and influence of Chilon may therefore be associated with the events of Anaxandrides' reign as follows:

c558: Prinetades' daughter born: Chilon of age to possess political
c550: accession of Anaxandrides II [interests
the bones of Orestes = the founding of the Peloponnesian League
despatch of the Dioskouroi to Lokroi
(547) friendship with Amasis of Egypt
(546) alliance with Kroisos

(546) conquest of Thyreatis: Chilon and Kythera
(545) diplomatic intervention at Sardis
(541?) marriage of Anaxandrides to Chilon's niece
(540?) birth of Kleomenes
the putting down of the tyrants: cf. Demonax in Kyrene
524 expedition to Samos against the medising tyrant Polykrates

It thus appears that the time of Anaxandrides and Chilon covers the period in which the dangers to Greek economic and political independence from Carthage and Etruria in the west, and from Persia in the east, became clearly defined. A number of Greek communities became closely attached to the barbarian powers: e.g. Miletos is in alliance with Persia and with Sybaris, which is allied to Etruria; Selinous in Sicily appears friendly to Carthage; Samos, once -after 546 - an ally of Egypt and Sparta, medises about 526 B.C. Probably we only hear of the most famous cases of political change: an exception may be the two generations of stasis in Miletos before the establishment of Histiaios by Dareios, i.e. the two generations cover the period of subject alliance to Kroisos and Kyros, and the alliance with Sybaris, so that economically it should be one of the happiest periodsof Milesian history. Politically however the situation may well have been unstable, and the Asiatic Greeks too unreliable as allies for Spartan safety. In 524 the Peloponnesian League was prepared to attack Polykrates, a Persian ally; but in 519 Sparta refuses to war against a Persian dependency. The context suggests that in the generation of Kyros, Sparta became the focus of the independence movement in Greece, putting down tyrants whose peaceful politics and economic ties had led them into Asiatic or western entanglements.

The latest appearance of Chilon the son of Demarmenos is on the occasion of his daughter's marriage to Demaretos: she had

previously been betrothed to Leotychides. If Chilon was still alive at this time, he must have lived until about 515 B.C., for Demaratos was still alive about 465, when Themistokles arrived in Persia, and his marriage can hardly be placed more than 50 years before. Demaratos is first mentioned in connection with the expedition of 510 B.C., and he may not then have been long on the throne. On the other hand, the story of Chilon and Hippokrates suggests that Chilon was dead by the time of the expulsion of Hippias. The indications, such as they are, suggest that the period of Chilonian influence at Sparta was in the years 550/45 to 520/15, and among Chilon's last achievements was the placing of his grandnephew and son-in-law in the royal seats at Sparta.

vii. The reign of Kleomenes I

The Herodotean accounts of Kleomenes are notoriously difficult of interpretation: it is easier to appreciate the hostility of his sources to Kleomenes than their positive enthusiasm for anyone else, so that in fact they give no reliable information about an opposition to Kleomenes at Sparta. Another peculiar feature of the sources is that during the expedition of Dorieus and the Athenian revolution, the view of Spartan policy is pan-Hellenic, as in the time of Anaxandrides II; with the Ionian revolt and the Argive war the horizon becomes narrower, till in the last days of Kleomenes the narrative centres in the fantasies of his own maddened brain. This is drama on the scale of the tragedy of Aias; as a background to the Athenian glory at Marathon it could not be improved; as an explanation of how Athens inherited the place of Sparta as the focus of Greek independence it movingly implies that something went very

wrong at Sparta; but it has removed or concealed all the information which would make it intellectually possible for modern students to experience the tragic katharsis. For Herodotus however the tragedy is the datum, and the narratives illustrate its course; consequently the first task of the critic is to place the narratives according to the development of the tragedy, and after that to consider the tragedy as a historical records.

α. Up to the mission of Aristagoras

The first part of the reign of Kleomenes extends to the mission of Aristagoras to Sparta in 499 B.C., and covers four main events: the Plataian alliance (according to the date given by Thucydides), the mission of Maiandrios, the expeditions of Dorieus, and the Athenian revolution. These may be discussed in turn.

1) The Plataian alliance. This is dated by Thucydides to the year 519, that is, the first chronographic year of Kleomenes. The chronography confirms the text, but weakens the reliability, of Thucydides' date. The Herodotean narrative of the ensuing war with Thebes and arbitration by Corinth, that no Boiotian city should be forced to join the Theban League, makes it plain that the Peloponnesian and Boiotian Leagues were not wholly friendly at this period: Herodotus' definition of the Spartan motive as being concealed enmity to Athens is probably an anachronism.

2) The appeal of Maiandrios seems also to belong to the year 519: Sparta refuses to be led into a quarrel with Persia for the sake of a community which, according to the Herodotean narrative, was well content with the coming of the Persians.[2a]

3) The expeditions of Dorieus to Africa and Sicily. Reckoning back

2a. There is no evidence, other than this apparent anachronism, for an alternative dating for these early events of Kleomenes' reign. Nevertheless, if Herodotus' statement as to motives is to be pressed, as against the given dating (which is chronographic in both Herodotus and Thucydides, and implies that Peisistratos II, who was archon before the Plataian alliance, was archon in his early twenties), an alternative dating of some interest and considerable dubiety may be constructed, by the following argument:

(1) If the true dating of the Samians at Kydonia makes their destruction occur in 517, it is possible that Maiandrios resided in this "free Samos" for a few years after yielding the island to the Persians. If so, it is not necessary to date Maiandrios' arrival in Sparta before 516, and therefore it is not necessary to date Kleomenes' accession earlier than that year.

(2) Herodotus' Skythian dates seem to confuse the events of 519 with those of 513 B.C. If that has happened in relation to the Plataian alliance (and the confusion has been transmuted into chronographic dating by Thucydides), then we could calculate that Peisistratos II may have been archon in 514, and that in this year Thebes may have attacked Plataia. The Plataian appeal, the Corinthian arbitration, and the Theban attack on Athens, would then be dated to 513, i.e. to the same campaign as that in which the exiles were defeated at Leipsydrion. This dating obviates any unease about the archonship of Peisistratos II, but raises questions of interest about the policies of the Boiotian and Athenian governments at this time; we should have:

514: exile of the Alkmeonidai etc. War of Thebes and Plataia
513: alliance of Hippias with Plataia. Hippias defeats Thebes, and the exiles at Leipsydrion
512: Hippias marries Archedike to Aiantides
511: Anchimolios in Attika: Thessalian allies of Hippias presumably come through Boiotia
510: Kleomenes in Athens: Thessalian allies of Hippias presumably come through Boiotia
507: Concerted action of Peloponnesian and Boiotian Leagues against the democracy.

This would mean that Hippias regained Theban support in 512, and that Kleomenes' attempt in 513 to set Athens against Thebes had not been successful. After this failure, Sparta herself intervenes in Athenian affairs.

from the fall of Sybaris in 511, the following dates appear:[3]

3. cp. Dunbabin 348ff

514 Dorieus settles in Kinyps
512 and is expelled by the Carthaginians and their allies
On the advice of the oracles of Laios, and with the equivocal sanction of Delphi, he plans to settle Herakleia in Eryx
511 Dorieus aids Kroton against Sybaris, lands in Sicily
510 wars with Segesta and the Phoenicians: killed
c509-5: Euryleon conquers Minoa, puts down the tyrant Peithagoras of Selinous, becomes tyrant himself, and is killed.

One of the remarkable features of this narrative is the failure of Dorieus to secure any aid from Delphi until the grudging response[4] in 512; the alternative oracular source is named by Herodotus as the

4. The promise that Dorieus would take the land for which he set out was fulfilled, on one story, when he aided the capture of Sybaris. The story that he did not fight against Sybaris belongs to the same narrative as makes him succeed temporarily in founding Herakleia Minoa. The two narratives are exclusive: and a decision between them needs non-literary evidence, for although combinations can be made easily enough, these are not history.

oracles of Laios. Laios also appears in Spartan history as ancestor of the Euryleon who fought in the first Messenian War. The mention of the oracles here, and the name of Euryleon as a synoecist with Dorieus, suggests that the expeditions of Dorieus were due to Aigeid influence at Sparta, Thera, and Kyrene: the same sources may be responsible for the aim of a hundred Greek cities round Lake Tritonis. If this is the case, the settlement in Kinyps should be related to matters in Kyrene at this time, where Arkesilaos III had subverted the constitution of Demonax, and paid tribute to Kambyses in 525. His expulsion and flight to Samos, and raising of an army there, will fall in 523 (after the Spartan siege of 524, and before the death of Polykrates in 522). His return to Barke was followed by his murder (c520) and the Persian destruction of Barke in 519. The apparent relationship between these events in Kyrene and the settlement of Kinyps is:

c524: Spartan expedition against Polykrates
c523: Arkesilaos III in Samos: his restoration
c520: his murder
519: Persian destruction of Barke and occupation of Samos
(Spartan refusal to aid Maiandrios ?516)
(Alliance of Plataia and Athens: war of Thebes and Athens
517: Aiginetan destruction of the Samians in Kydonia ?513)
516-5: Spartan "thalassocracy": fall of Lygdamis of Naxos
Aigeid aims to drive the barbarians from N. Africa ?
decision to settle Kinyps
514-2: Dorieus in Kinyps

After this setback, Dorieus was directed by the oracles of Laios to Sicily, and his aims were sanctioned by Delphi. The contrast-distinction to the absence of Delphic approval for his African venture is important, and the Herodotean narrative supplies the clue to some political trends at this period. At an undefined date, but probably after the murder of Hipparchos, summer 514, the Athenian tyrants exiled the Alkmeonidai, who rose to great favour at Delphi and were thereby enabled to press upon the Spartans the desirability of freeing Athens first, before other action was undertaken. In 513(?) the Alkmeonidai and other exiles invaded Attika and were defeated at Leipsydrion. The year 513 was probably also that of the Skythian expedition, when the Athenian principalities of Sigeion and the Chersonese were active supporters of Persia. The marriage of Hippias' daughter Archedike to Aiantides probably took place in the following year, and can only have been intended, and taken, as an advertisement of a medising turn in the policy of Hippias: it is followed in 511(?) by the first Spartan attack on the tyrant, under Anchimolios. The winter of 512-1 would then be the time of the Spartan decision on the Athenian war, and this seems to be the same time as the Delphic sanction to Dorieus, which thus may be taken to mark the rapprochement of Sparta and the Athenian exiles, so that Dorieus was not bidden to free Athens first.

The Aigeid flavour of Dorieus' Sicilian expedition is marked not only by the oracles of Laios and the name of his synoecist Euryleon, but also by the fact that, after Dorieus' death, his war against Carthage is inherited by the Aigeidai of Sicily (the Emmenidai of Akragas) and their allies the Deinomenidai. The continual appearance of this widespread kinship group in the history of this period is most instructive, and must also be borne in mind when considering Spartan relations with Boiotia and Samos. In the early years of Kleomenes, the story of the Plataian alliance shows the relations between the Peloponnesian and Boiotian Leagues, but in 512 it is a Boiotian from Eleon who gives the oracles of Laios to Dorieus, and the Aigeidai of Boiotia were an important kinship group. By 513, Boiotia was the base of operation for the Athenian exiles, so that we should probably conclude that the Alkmeonids had gained the support of the Boiotian Aigeids, and used them as well as Delphi to influence Sparta. Samos appears in this connection because a Samos appears in the mythic genealogies as son of Theras and ancestor of the Akragantine Aigeids.

At the least therefore we may infer something of the Herodotean source for the events of Kleomenes' reign up to the winter of 512/1, since Boiotia, Samos, Thera (and Kyrene) and Sicily are all places where the Aigeidai had kinsmen. At the most, we may infer that the Spartan Aigeids were a dominant political group in Sparta during this period. A single policy underlying these events would, generally speaking, be implied by the dominant interest of a single group, and the biography of Dorieus seems to imply a consistent interest in the maritime relations of which the lines of communication passed the shores of Lakonia. This interest is clearly forecast the generation

before, in the alliances with Egypt and Lydia, and the securing of Thyreatis and Kythera: the last associates this policy with the name of Chilon. Many questions arise from this: whether Chilon represents the preceding generation of Aigeid influece; the relation of the period of Aigeid influece to the formation of the Spartan historical tradition (e.g. was the anchisteia origin of the double kingship modelled on the dynastic marriages of the family of Demarmenos?); the relationship of Chilon's policy to the Lykourgan reforms of the preceding generation; and the relationship of Lykourgos to that earlier Aigeid period represented by Eurykleon the general in the first Messenian war.

4. The Athenian revolution.

This occupies the rest of the Herodotean narrative up to the time of the mission of Aristagoras in 499 B.C. The Spartan agreement with Delphi and the exiles seems to belong to 512, the expedition of Anchimolios to 511, and the first invasion of Attika by Kleomenes, and the fall of Hippias to the beginning of 510, soon after mid-summer. The Herodotean narrative then implies the struggle of Isagoras and Kleisthenes through 509, ending with the election of Isagoras to the archonship: to which Kleisthenes replies by setting forth his proposals for democracy.[5] Isagoras (in 508) then calls on Kleomenes, who orders Kleisthenes out of Athens; Kleomenes arrives in Athens and expels seven hundred households, but is driven out by the Athenians; Kleisthenes and the 700 return, and a request for alliance is sent to Sardis. From the Herodotean narrative, it

5. His reorganisation of the voting system (through demes instead of clans) amounting to an effective enlargement of the franchise, and leading to the story that he admitted new citizens.

seems to be in the following year (507) that the Peloponnesian League concerts an attack on the democracy with Thebes and Chalkis; the course of the story implies that when the Peloponnesian army reached Eleusis, Kleomenes revealed his project of not only driving out Kleisthenes and restoring Isagoras, but of establishing Isagoras as "tyrant", i.e. garrisoning Athens. Kleomenes' reason will have been the medism of the democracy; Demaratos and the Corinthian traders were presumably less stubborn in their opposition to the barbarian.

In the course of this same campaigning year, the Athenians defeated the Thebans and Chalkidians, taking many prisoners whomx they kept "for a long time": at least the following year, 506, must be occupied therefore by the ransoming of the prisoners, before Thebes receives the Aiakidai from Aigina and attacks Athens again, not before 505, and is again defeated. According to Herodotus, the Thebans then returned the Aiakidai and asked Aigina for more substantial aid, which was granted in the form of an "unheralded" raid on Phaleron, while the Athenians were busy fighting the Boiotians. The Athenians, instead of taking reprisals, applied to Delphi and were told to wait for 30 years, after dedicating a precinct to Aiakos. The Athenians however prepared to attack Aigina, but were prevented by a new movement by the Peloponnesian League, which was considering the proposal of Kleomenes to restore Hippias as tyrant. The Corinthians are represented as the chief, and successful, opponents of this proposal; the expedition was abandoned and Hippias returned to Sigeion, where he refused offers of hospitality form Macedon and Thessaly. Instead, he went to

Sardis, whither the Athenians despatched an embassy to counter his influence, and were unsuccessful.

The difficulties of this narrative do not lie in the construction of a time-scale, which may be imagined on the following lines:

512: rapprochement of Sparta, Delphi, and the exiles
511: expedition of Anchimolios (expedition of Dorieus)
510: expedition of Kleomenes: expulsion of Hippias
509: struggle of Isagoras and Kleisthenes: Isagoras archon-elect
508: Kleisthenes in exile; Kleomenes and Isagoras expelled; medism of Kleisthenes
507: alliance of the Peloponnesian League with Boiotia and Chalkis: projected tyranny of Isagoras
506: ransoming of the prisoners
505: the Aiakidai in Thebes
504: raid on Phaleron
503: Hippias at Sparta: project for his restoration
502: Hippias at Sigeion: negotiations with Macedon and Thessaly
501: Hippias at Sardis
500: Athenian embassy to Sardis

The difficulties lie in inferring the aims and policies of the chief combatants in the struggle. These seem fairly clear up to the events assigned to 504 above: the Athenian people are determined to defend the democracy; Kleisthenes is prepared to medise in his own interests; the Spartans, having driven out Hippias after his medism, are equally prepared to fight the continuers of that policy; the Aiginetai recognise their obligations, but are hardly prepared to act upon them. After this, the situation becomes problematic: why was the raid on Phaleron, and other descents on the Attic coast, "unheralded" if it was approved by the Aiginetan government? why did the Athenians get an oracle instead of themselves deciding what to do? - and it may be noted that thesequestions arise even if Herodotus has misdated these events; and chiefly, why did Kleomenes urge the restoration of Hippias? The Aiginetan questions

suggest their own answers: it may be that the raids on the Attic coast were due to a party in Aigina which the government did not officially approve, either because the party did not control the government, or because the government wished to be in a position to disown the activities; the Athenian application to Delphi thus gives the Aiginetan government time to disown its agents or opponents. This would imply war and peace parties in both Athens and Aigina at this time, the Aiginetan peace party having been responsible for the sending of the Aiakidai to Thebes instead of making war on Athens. The activities of the Boiotians in this period are complicated: before 513(?) they are hostile to Athens and -presumably, inview of the verdict given by her arbitration - to Corinth; in 513 the Athenian exiles are in Boiotia; in 512 Anticharos of Eleon is associated with Dorieus and Athenians sail with him to Sicily; in 511 and 510 the Thessalian allies of Hippias must have come through Boiotia; about 507 the Thebans concert with the Peloponnesian League once more, and thenceforward continue the war, although the Peloponnesian League is inactive. Perhaps the most revealing events in these later years are the negotiations of Hippias with Macedon and Thessaly: Macedon had not yet medised, and Thessaly was an old ally of Hippias: by about 504 Boiotia and an important group in Aigina were hostile to Athens, and Kleomenes may have hoped that the restoration of Hippias would bring in Thessaly and Macedon to the Spartan side. If so, the peculiar inconsequence of the Corinthian speech against Hippias is explicable as representing the fact that the Corinthians could hardly openly threaten to medise (the only practical alternative to Spartan policy at this time, as the Athenians realised) but merely

appeal to a general hatred of tyrants. In that case, the invitations to Hippias from Thessaly and Macedon after the failure of Kleomenes are attempts to retain him from final medism: Hippias no doubt had his own estimate of the comparative uses of Persia and Sparta, and repaired to Sardis. The failure of the Athenian embassy there was the end of this phase of Athenian medism, and left the relations between Athens and Sparta, and Sparta, Thessaly and Macedon, in suspense.

β. From the mission of Aristagoras.

During the early years of Kleomenes, the relations of Sparta and Athens are of three kinds: friendship with Hippias, enmity to Hippias, and enmity to the democrats and attempted restoration of Hippias. Sparta is apparently hostile, then friendly, to Boiotia; hostile, then friendly, to Delphi. These kaleidoscopic changes do, in point of fact, admit (at least) of a rational explanation, in the steady pursuit of independence of eastern and western barbarians; but this policy was no doubt couched in Spartan terms, which meant Spartan leadership of the free Greeks and domination over the Messenians and Thyreatai. These two requirements define oligarchy, and the Spartans need have had no other known aim than the extension of oligarchy against tyranny, that is, control by the heads of the kinship groups over the commercial activities of their members. There seems to be no reason at this stage to suppose that Sparta possessed a pan-Hellenic aim as such, other than, or transcending, her policy of Spartan independence buttressed by subject allies. We cannot, for instance, suppose that if the alliance with Thessaly and Macedon had matured, Sparta

would not herself have medised rather than lose her constellated allies to a Persian conquest. Kleomenes could not foretell that his narrow aims would serve a wider end; nor, moreover, could those who observed his political turns from one alliance to another, which probably seemed to some of his contemporaries giddy and irresponsible.

1. The Ionian Revolt

The second period of Kleomenes' reign, in the Herodotean narrative, begins with the arrival of Aristagoras in Sparta in 499. According to Herodotus, Aristagoras urged Kleomenes to march on Susa, and when he refused, tried to bribe him, but failed. Aristagoras fared better at Athens, appealing to the ancient kinship of Athens and the Ionians, and finding it easier to deceive thirty thousand men than one. The Athenians consequently sent twenty ships to Miletos, and the Eretrians sent five; but after the first campaign in 498, neither city aided the Ionians further. Miletos fell to the Persians in 494; in 493 the Persian navy reduced a number of the islands and drove Miltiades from the Chersonese: he had been restored to this principality three years before (in 495: so Macan), after being driven out by the Skyths. In 492 Mardonios reduced Thasos and the Brygoi, and Macedon medised; in 491, the Persians sent heralds to the Greek states demanding submission. The Aiginetai medised, and Athens appealed to Kleomenes, who went to Aigina. The Aiginetai however refused to recognise his authority, as he was unaccompanied by Demaratos, who was in fact intriguing against Kleomenes; so Kleomenes returned to Sparta and in concert with Leotychides, and by suborning Delphi, secured the deposition of

Demaratos. Kleomenes and Leotychides then went to Aigina, took ten hostages, and lodged them in Athens. The Spartans however discovered Kleomenes' corruption of Delphi, and Kleomenes fled to Thessaly; returning to Arcadia, he attempted to rouse the Arcadians against Sparta, and the Spartans restored him to the throne. But now Kleomenes became quite mad, and was imprisoned by his family; he thereupon committed suicide. This fate came upon Kleomenes because of his subversion of the oracle; or because of his sacrilege in Eleusis; or because of his sacrilege at Argos during his war with that city. During this war Kleomenes defeated the Argives at Sepeia, shut up the survivors in the grove Argos, and burnt it and them together; after which he offered sacrifice to Hera and went home. He was thereupon brought to trial because he had not taken Argos, but was acquitted on the ground of an omen. Argos was so stripped of men that the slaves ruled for a generation. The Spartans however say that Kleomenes went made because of his heavy drinking, which he learned from a Skythian embassy to Sparta, which came to propose that the Spartans should march from Ephesos to meet a Skythic invasion of Persia through the Caucasus.

The Herodotean account of the second part of Kleomenes' reign thus begins and ends with proposals by Aristagoras and the Skyths for a march on Susa. Both proposals were refused by Sparta, and both tend to be regarded as fictions by modern commentators: but they belong to the same world of over-ambitious political thought as the hundred Greek cities round Lake Tritonis, a scheme which probably belongs to the early years of Kleomenes.

Herodotus' comments on the Ionian Revolt are always hostile; and few things are more astonishing than the remark by this admirer of Athens that it is easier to deceive thirty thousand men than one. This point of view is consistent throughout the narrative: whence it is to be inferred that the Ionians included in their policy some aims which were repugnant to the majority of the mainland Greeks, that Aristagoras revealed these, incautiously, at Sparta; that the Athenians only became aware of them in the course of the first campaign, and that the Skyths were concerned in them. The indications are that one element among the Ionians, represented by Aristagoras, really intended an attempt to bring down the Persian empire, and with this in view persuaded the Paiones in Asia to revolt and return home; allied with other Asiatic barbarians; called in the Skyths (who drove Miltiades out of the Chersonese some time before 495); and were concerned in the meditated Persian treachery in Sardis about 496.[6]

6. Hdt. 6.4

Aristagoras and Histiaios in fact seem to have attempted a political alternative to medism and lakonism in the formation of an alliance with subject and independent barbarians. Such a policy may have arisen in Ionia: something similar is found in Sicily during this decade: about 491 the Syracusan democrats ally with the Killyrian serfs to drive out the oligarchy.[7] The Syracusan example shows the

7. cp. Dunbabin p.414. An extreme democracy in Miletos would have to consider the problem of the Gergithian serfs, whose name makes them kin to the Teukroi, and some of the Teukroi were Greeks: see above chapter III D)

logical conclusion of the policy of alliance with non-Persian barbarians: Aristagoras was proposing an alliance on at least equal terms with peoples from whomm the Greeks drew their serfs and slaves.

Certainly Sparta would refuse such alliances; and if the Athenians became aware of these plans in 498, it gives a sufficient explanation of their withdrawal. Such proposals too would more than account for the oligarchic tone of Herodotus' narrative of the Ionian Revolt, as well as the Persian determination to conquer a Greece which had shown itself capable of engineering such combinations. In this last sense, the Ionian Revolt was the beginning of evil for the Greeks at large: after 511 and before 499 the Persians had pursued no active policy of expansion in the Aegean.

These indications of a third policy in Ionia at this time suggest the following dates:

499: Aristagoras' policy obtains no support in Sparta. He requests Athens for assistance against Sardis only, and this is granted.
498: Melanthios (a good Medontid name) of Athens in command of the Athenian force in Ionia.
The rebel Paiones shipped home by the Ionians.
497: The Athenians refuse further aid to the Ionians: Hipparchos as archon-elect suggests Athens was prepared to form a common front with Persia against the barbarian danger.
? Skyths in the Chersonese expel Miltiades
496? Persian treachery in Sardis
Skythic embassy to Sparta gains no support.
495? Histiaios at Byzantion
Skyths leave the Chersonese: Miltiades restored
Persians organise a fifth column of tyrants
494: Fall of Miletos

2. The Argive War

This suggested course of events seems to be the political context of the double oracle which Herodotus believed foretold the fall of Miletos and Argos. The oracle was given to the Argives upon an unspecified occasion: it said that when the female conquered the male drove him out and won glory in Argos, then Argive women would mourn: so that men afterwards would say that the terrible three-coiled serpent perished by the spear; and then indeed Miletos, the contriver of evil

deeds, would become a feast for many, and an excellent booty: her women would wash the feet of long-haired masters, and Apollo's shrine at Didyma would pass into alien hands. Herodotus reports that as a result of this oracle, the Argives feared that some trickery when Kleomenes attacked them: this probably means that the Argives believed that Hera (the female) would drive out the male (Lakedaimon) but the outcome would be mourning in Argos. According to Herodotus' narrative, this happened: while he was sacrificing to Hera, the goddess gave Kleomenes a sign which sent him home without taking the city.

The conquest and expulsion of the male by the female, and her glory in Argos (or Greece) is of course open to other interpretations; in its most general sense, the oracle pictures a subversion of the natural order of things, which is what Aristagoras' policy intended, so that the apostrophe to Miletos is relevant, and would no doubt have been equally fulfilled if the Skyths had found admission to Asia Minor. The oracle was then believed by Herodotus to have been delivered during the Ionian Revolt: this limits his dating of the Argive War.

The war is further limited in dating by the fact that Kleomenes used Aiginetan ships for his army: this means that the Argive war was either before the medism of Aigina or after the taking of the hostages. Argos later revenged herself for these Aiginetan ships, and the refusal of Aigina to pay the fine she imposed for them, by refusing official aid to Aigina in her Athenian war. It is thus inferred that up to the time of the Argive war, Aigina was formally a member of the Argive, not of the Peloponnesian League, as a colony of Epidauros should be by origin: and this illuminates the Phaleron affair, which consequently

marks a rapprochement between the Peloponnesian, Boiotian and Argive Leagues, and is followed by Kleomenes' scheme to restore Hippias and, perhaps, gain the allegiance of Thessaly and Macedon. This attempt had failed by about 501, when Hippias rose to favour at Sardis: if he retained any influence in Argos, Thessaly, and Macedon thereafter, he would employ it on the side of Persia.

The new policy of Aristagoras initiated in 499 seems to have introduced a new disturbing factor into the unstable situation in Greece. The dangers of the barbarising policy seem to have been generally appreciated by 497: in Athens this would be the cause of the appearance of Hipparchos as archon-elect in that year as an advertisement of readiness to ally with Persia against the barbarians. Thessaly, Macedon and Argos can hardly have escaped some effects of this change: and this will be the period of the double oracle, warning Argos against medism and condemning the barbarism of Miletos. That is, the oracle is in favour of the Spartan policy of Greek independence, which suggests it was procured by Kleomenes. Support for this suggestion comes from Herodotus' account of Kleomenes' defence when he was brought to trial after the Argive war, when he claimed that his conduct of the war was guided by, and fulfilled two oracles: one, that he would take Argos, which he did by burning the grove; the other, that the female should drive out the male, which happened when Hera gave her sign to Kleomenes. This argument would place the oracle in 495, when the end of the Ionian Revolt was approaching, Miltiades had been restored to the Chersonese, and the pro-Persian tyrants were active in Ionia.

The use of Sikyonian and Aiginetan ships by Kleomenes suggests that he was determined to destroy the Argive league at the time of

his war against Argos, and transfer her subject allies to Sparta. Herodotus' account of the results of the war to Argos is very highly coloured: Argos was so empty of men that the slaves took over the government until the sons of the slain grew up, and expelled the slaves who took refuge in Tiryns. Thereafter they were at peace, until an Arcadian seer stirred up the slaves against their masters: then after a long fight, the Argives won. By the end of this story, the "slaves" include the free men of Tiryns, who had probably never been of less account than subject allies of Argos; and probably the whole tale is concerned with the temporary enfranchisement in Argos of such previously unprivileged freemen. If so, the name of the slaves is a deliberate distortion of the facts, and such a distortion can hardly come from a Spartan source, which accused Kleomenes of not doing enough damage to Argos. Rather it is an Argive version, intent on increasing the criminality of Kleomenes for revolutionising a Greek city, and adding to the glory of these latter-day Epigonoi, who overcame the danger Kleomenes had led loose.

On his return to Sparta, Kleomenes was accused of being bribed not to take Argos, and these seem to be the charges that Demaratos was laying against him while Kleomenes was first in Aigina. In that case, some of the Spartan domestic politics which Herodotus recounts under the year 491 should belong to the previous years, and a possible course of events is as follows:

499: Sparta refuses aid to Aristagoras
498: Athens becomes aware of Aristagoras' policy
497: Athens refuses aid to Aristagoras
496: Hipparchos archon: Athenian readiness to ally with Persia against the barbarians: probably a general tendency to medise in the Greek states at this time
495: Kleomenes obtains the double oracle
494: campaign of Sepeia: attachment of Aigina and Sikyon to Sparta

493: Demaratos active against Kleomenes for not attaching Argos to Sparta
492: compact of Kleomenes and Leotychides, Kleomenes and Kobon of Delphi
491: Kleomenes in Aigina (Athens appeals to Sparta, as Aigina no longer in the Argive League)
Leotychides prevents Demaratos from bringing his suit against Kleomenes: deposition of Demaratos and accession of Leotychides: Demaratos elected to magisterial office, and proceeds against Kleomenes
Kleomenes and Leotychides in Aigina: the hostages given to Athens
The trial of Kleomens proceeds: his defence accepted: flight of Demaretos
Kleomenes' compact with Delphi made public as a result of the trial: flight of Kleomenes to Thessaly
490: Kleomenes in Arcadia: (Messenian Revolt): restoration of Kleomenes and his imprisonment: Marathon
489: (Messenians in Zankle. Gelon appeals to Leonidas) Death of Kleomenes

On this interpretation, it may be said that in general Sparta is in a state of stasis from the return of Kleomenes from Argos until his death, and as the struggle deepens, Demaratos is driven to medism, and Kleomenes to the opposite extreme of engineering a Messenian revolt. Herodotus, who is comparatively kind to Demaratos, leaves us in no doubt which was the graver crime, and his attitude here is the same as his judgements upon the Ionian revolt.

3. Herodotean historiography of Kleomenes' reign

On the basis of this general interpretation, we may consider Herodotus' formal arrangement of the history of Sparta under Kleomenes. It falls into three sections, with a prologue and epilogue as follows:

Prologue: the mission of Maiandrios (3.148)

Act I: Sparta before the arrival of Aristagoras (5.39ff)

1. the inheritance of Kleomenes
2. the rashness of Dorieus in Kinyps
3.a. Dorieus in Sybaris: note on the evidence
b. Dorieus in Sicily
4. the tyranny of Euryleon
5. the short reign of Kleomenes

Act II: Athens before the arrival of Aristagoras (5.55ff):
the "annotated annals"

514: the murder of Hipparchos
the Gephyraioi and the Phoinikes
513: Leipsydrion
the rebuilding of Delphi
512: Delphic influence on Sparta
(the response to Dorieus)
511: expedition of Anchimolios
the tomb of Anchimolios
510: expulsion of Hippias
ancestry of Peisistratos
509: rise of Isagoras: democracy of Kleisthenes
Kleisthenes of Sikyon
508: Kleisthenes and the 700 expelled by Kleomenes
Kylon
Kleisthenes returns: Sardian embassy
507: Kleomenes at Eleusis
new law at Sparta
defeat of Thebes and Chalkis
506: ransoming of the prisoners
offering in the Propylaia
the effects of freedom
505: the Aiakidai in Thebes
504: Phaleron
the ancient feud
the 30-years oracle (perhaps misplaced)
503: Hippias at Sparta
tyranny at Corinth
502: Hippias at Sigeion
the Mitylenian war
501: Hippias at Sardis
500: Athenian embassy to Sardis

Act III: Sparta and Aristagoras

Aristagoras in Sparta 499 (5.39)
the medism of Aigina 491 (6.49)
<u>stasis</u> in Sparta
i. the royal trials of 491 B.C.
A. the royal feud:
Demaratos accuses Kleomenes
origin and race of the dyarchy
royal status in Sparta
Kleomenes' compact with Leotychides
the birth of Demaratos
Kleomenes' compact with Kobon
later flight of Kobon
B. the trial of Demaratos
Demaratos deposed
his flight to Persia
Leotychides succeeds
his family and unhappy end

C. the Aiginetan hostages lodged in Athens 491
consequences to Kleomenes of the trial of Demaratos:
the discovery of his machinations
his flight and subversive activities
his restoation and imprisonment
his death
D. the trial of Kleomenes
the Argive war: its results -
the successful defence of Kleomenes
the rule of the "slaves" in Argos
ii. the Spartan view of the stasis
it was all due to the Skythic embassy
Appendix: the remaining events of the Aiginetan war

Epilogue: the Plataian alliance (6.108)

The extreme unevenness of detailed treatment in these various periods of Spartan history is perhaps a reflection of Herodotus' sources. The "annotated annals" probably come from Athens, and the two other main sections from ultimately Spartan and Argive sources. The first seems to reflect the importance of the Aigeidai in the early part of Kleomenes' reign: it is less hostile to Dorieus than to Kleomenes, perhaps because to later Spartans Dorieus merely failed, while Kleomenes was an active menace after 494. The famous and disputed comment that, if Dorieus had been patient he would have succeeded Kleomenes, who reigned not a great time and died childless, leaving an only daughter Gorgo, is a reference to the fact that Kleomenes was succeeded by his brother, Gorgo's husband, as well as a compromise, disguising the discrepancies between the Herodotean interpretation of official Persian dating, and the Aegean traditions about the early years of Kleomenes (see above section B).

For the period of the "annotated annals" Herodotus does not seem to use Spartan sources; and when he returns to these for his third period, they suffer from the inevitable but extreme disadvantage

of excluding from the start the legitimacy of recognising the right of "Aristagorism" to exist: they clearly regard that policy as subversive and the root of all evil, corrupting the mind that would admit its consideration. The reasons for this are plain enough: the freeing of the serfs of Sparta, or the slaves of Athens and other democratic states, would have shattered the Hellenic achievement as that was contemporarily seen: the policy of Aristagoras would mean the end of Greece; and any national organism will submit to uncalculated distortions imposed from outside rather than surrender its own sense of its existence. Aristagoras and Histiaios, the leaders of the new policy, began their careers as Persian agents and ended as bandits; they had severed their roots in Miletos, and were as much at home in Susa or Sardis as in Greece. Large political schemes are fecund in men such as these, cosmopolitans who carry the world in their heads; and in Asia and Sicily they could persuade large numbers of people who were too oppressed to have political judgement. Herodotus describes them as adventurers prepared to sacrifice any number of lives to increase their own well-being; and this verdict of their contemporaries and successors may be accepted. What Greece could achieve in democracy, she did; and never pretended that the cost was less than the existence of serfdom and slavery, and the other evils of her culture at peace, and continual war and intrigue against the outer barbarians.

One of the tasks of any account which gives a rational explanation of Kleomenes' policies is to explain Herodotus' insistence on his madness. This is stated at the beginning of the story of Dorieus (5.42), and serves to explain why Dorieus left Sparta; and is invoked again upon Kleomenes' restoration to explain his imprisonment and death (6.75).

The early part of Kleomenes' reign is marked by tactical changes of policy which a kindly critic might call evidence of tenacity and suppleness; in themselves they do not afford much ground for a belief in madness, though his actions may have had a general air of unpredictability to contemporaries who were required to do the fighting necessary to put down and set up tyrants in Athens. A responsiveness to events and processes, and a brusquerie to colleagues which sees them as the instruments of process, make a disturbing combination in a single personality. But in fact it seems that all this prepares the way merely for the important accusation of madness after the restoration of Kleomenes, which was probably believed because of his immediately preceding activites. The history of the stasis in Sparta is oversimplified in Herodotus into an account of the causes celèbres of 491, and the arguments then used: the development of the feud in the years 493/2 is not clearly traced. Kleomenes had revolutionised Argos, and, apparently, detached some of her subject allies: his enemies were displeased because he had not brought Argos herself into subject alliance to Sparta. Aigina in 491 ignored the warning against medism, and there is a suggestion of hysteria at Sparta. The meddling of Demaratos suggests that he was prepared to medise and retain the subject allies willingly; Kleomenes is still for putting down medism forcibly, and the calculated insult to the deposed Demaratos seems intended to make him reveal his true colours. Nevertheless, the support for Demaratos at Sparta must have been strong, for he was elected to magisterial office after his deposition. The turning point in the story comes with the accusations against Kobon and Perialla at Delphi, which suggests an anticipation of the

later known medism of the oracle: many mainland states, says Herodotus, had received the heralds of Dareios well, and the oracle seems to have passed out of Kleomenes' control into the hands of his opponents. (The allegation of bribery in later days was a useful stick with which to beat Kleomenes, and disguise the treachery of Apollo.) Kleomenes abandoned Sparta to his enemies (who seem to be the medising party), and attempted to raise the Arcadians (and the Messenians) against his own traitor city. This development of Aristagorism by a representative of Sparta would account for more stories of "madness" than Herodotus retails, and for the speed with which the Spartans lured Kleomenes home to imprisonment and death. This restoration of Kleomenes, however necessary to Spartan existence, would of necessity also be a statement of abandonment of overt medism: only after this restoration could the Athenians have sent Pheidippides to Sparta.

A long list is often made of Spartan failures under Kleomenes. Against these must be set the destruction of the traitor city Sybaris and the appearance of a national movement in Sicily against the Carthaginians; the unintentional hammering of the Athenian democracy into a community capable of self-defence; the advertisement to Argos, Macedon and Thessaly of support against the Persian; the stemming of that counsel of despair, Aristagorism; the warning to would-be medisers on the mainland contained in the ruthless treatment of Argos; the rescue, by desperate measures, of Sparta from her own medising party. Kleomenes appears through these narratives as an expert politician, a ruthless soldier, and an overbearing colleague; the exercise of his rough tenacity over a generation of confusion may be one of the chief causes of the Persian defeat, for while Sparta

was, apparently, in the grip of hysteria in 490, and the Peloponnesian League was not mobilised, the Athenians solved the Spartan dilemma by defeating Datis. Thenceforward there could be no medism at Sparta so long as she claimed leadership of the free Greeks, until the necessities of the Peloponnesian war changed everything.

The tragedy of Kleomenes, as told by Herodotus, is on this interpretation the foundation-legend of fifth-century Sparta, and that is why the story is cast in tragic or mythic form. Kleomenes, who provided a policy and a strategy to Sparta in his lifetime, continues to serve her as an awful example after his death. The whole weight of responsibility for error, madness, and untimely birth is placed upon him; he absorbs the weaknesses of the Sparta of his day, and no greater or more inadvertent estimate of the strength and unloveableness of the man is necessary.[8]

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8. Pausanias' date for the Argive war in the first year of Kleomenes belongs to a different concept of the "tragedy of Kleomenes" in which the unhappy king seals his own doom immediately on his accession: that is, the year is an ethical dating, not a historical variant, carrying a much simpler and more melodramatic view of the "tragedy". Wells (Studies 74ff) accepts Pausanias' date, and adduces evidence to show that "Argos between 490 and 470 was in the very reverse of a crushed condition". His points are
1) it is generally agreed that Herodotus intended the Argive war to be near the end of Kleomenes' reign: in 480 the Argives do not join the Greeks, pleading the recent loss of 6,000 citizens to Kleomenes; the oracle associates the Argive war and the fall of Miletos. But
2) in 479 the Argives undertook to prevent the Spartans marching out against Mardonios (9.12), although they did not implement the promise
3) Aristagoras (in 499) urged Kleomenes to leave fighting the Messenians, his evenly matched foes, and the Arcadians and Argives(5.49)
4) before 485 Argos sent 1000 volunteers to aid Aigina (6.92)
5) between 475 and 465 Argos disputed the hegemony of the Peloponnese with Sparta, at the battle of Tegea (9.35)
6) the "slave" rule (6.83), the expulsion of the "slaves", the period of peace, and the capture of Tiryns c472 require more than the 24 years' interval
7) the great sculptor Hageladas (working 468,460, and earlier) could hardly be supported by a "depopulated and distracted city".
8) the early date for Sepeia brings Kleomenes north about the time of the Plataian alliance (possibly the re-dorisation of Sikyon should be brought in too).

On these points it may be said:
1) Herodotus' story of the "slave" government is much overdrawn: a probable historical original is that some of the lower classes were made citizens in order to create the semblance of an army capable of national defence. This would be politically unreliable in an oligarchic war, so Argos sends volunteers to Aigina (cf. the voluntary aid to Finland during the war against fascism.)
2) the promise to Mardonios is anti-Spartan and medising; it is not carried out. This implies the same divisions in Argos as over the Aiginetan affair.
3) Aristagoras contrasts the "evenly matched Messenians, the Arcadians and the Argives" with the soft Asiatics, who would not give the Spartan a good fight. The Messenian wars were (by 499) over a century old; the Arcadian wars 50, and the campaign in Thyrea 40 years before. If the creator of Aristagoras' speech had known of a pertinent particularity for his argument, he would have used it.
4) at the battle of Tegea, the Argives had allies
5) if the Sepeia campaign was in 494, and the capture of Tirys in 472, the Argive army contained 22 classes from the "sons of the slain" alone, not counting survivors and new citizens. The effect of the massacre on the birth rate would appear after, rather than before, 472
6) sculptors work in lands more heavily defeated than Argos, and monuments to the fathers are an obvious means of nurturing the sons' morale
7) Telesilla's biography makes her contemporary with the Argive war, but the chronographic tradition in Eusebius places her akme in 449, so there was another account of her life. (We can hardly copy the usage of solving the contradiction by postulating another of the same name - a grandmother of the poetess - in this case!) There is a hint that Demaratos led an attack on the town of Argos while Kleomenes was getting his sign at the Heraion: if this is true, it would seem that Kleomenes ordered him to retreat, Kleomenes' reason for leaving Argos independent may be guessed to be the desire to afford her no pretext for medising; Demaratos and his men may well have been very sore at being baulked of their victory, and thus led to initiate the causes celebres of 491; to the Argives, such a miraculous deliverance may well in later times, and under the influence of the famous oracle, have been associated with the name of a woman whose poems probably did much to sustain the morale of Argive aristocrats in the difficult times (after 472) when the full effects of the massacre were felt.
8) the charges against Kleomenes on his return from Argos may be identified with the charges against Kleomenes during his absence in Aigina. Wells does not notice this.
9) the re-dorisation of Sikyon (60 years after the death of Kleisthenes) may be closely associated with the paying of the fine to Argos at the time when Aigina refused to pay, sometime before 485 (6.92). This may perhaps be placed during the Spartan stasis, i.e. about 492/1.
10) the presence of Kleomenes, and the Corinthians, north of the isthmus about 514 B.C. is unexplained by Herodotus, nor do we know of any reason why the two chief members of the Peloponnesian League should have forces in, or passing through, Boiotia at this time. But we have already noted that the Delphic oracle is not

mentioned in Spartan history of this period until the winter of 512, and the absence of its sanction for the African venture of Dorieus in 515/4 may be indicative of some hostility. This may suggest that the events of 514 were associated with Phokis, and this brings to mind the Thessalo-Phokian war in which Tellias of Elis was employed as the Phokian seer (8.27), which was "not many" years before Xerxes' invasion. Tellias' son (?) Hegesistratos was on the Persian side at Plataia in 479. During this war, the Phokians were blockaded in Parnassos for a time, which means, probably, that the oracle was besieged. If the various events are connected, there was perhaps a quarrel between the Amphiktions and the temple administration or the Phokians. In the 560's, Corinth seems to have exchanged her influence at Delphi for a share in the prestige of Olympia, and the friendship of Periandros and Alyattes is matched soon after by the friendship of Kroisos to Delphi. During the year 550-30 however there is evidence in the west of a certain poverty in the Corinthian area, by contrast with the Phokaian area and a certain increase of Lakonian influence; the Corinthian area begins to recover when the Phokaians are overcome by the barbarians. There may well have been people at Delphi and Corinth who would not have been sorry to follow the lead of Sybaris and Samos in their barbarising policy in the 520's: such a movement in the mainland would account for Kleomenes' refusal of Samian entanglements about this time, and a sense of Corinthian unreliability might explain the Spartan venture into "thalassocracy" early in Kleomenes' reign.

D. The Chronographic Framework in Book I.

The Herodotean treatment of Spartan history seems to show that the "annotated annals" came from Athens, and Herodotus either was not sufficiently sure of them to lend the years his authority; or, perhaps that he took it for granted that anyone interested in the annals, without the annotations, could look them up. His own contribution may be the 30-years' oracle after Phaleron, which he identified with the "first outrage" that originally described the capture of the Theoroi.

In his Spartan material, Herodotus dates Dorieus by reference to Sybaris, but gives no date by the regnal year of Dareios or by reference to the "annotated annals". The final events of Kleomenes' reign are dated by reference to the medism of Aigina in 491, a year which would come from Athenian annalistic sources. For Sparta herself therefore Herodotus uses generations only, aided by the general conceptual framework of the tragedy of Kleomenes.

Consequently, before considering Herodotus' history of Athens, whence come the "annotated annals" and other year-dates, we may usefully examine his employment of year-reckonings in Book I. The discussion proceeds under the following heads:

i. Herodotus' absolute dates for Persian reigns
ii. calculated dates for Median reigns
iii. calculated dates for the Assyrian and Median empires
iv. calculated dates for the Lydian kings
v. chronographic generations
vi. ~~synchronisms by generations~~ generation count in Mesopotamia
vii. synchronisms by generations
viii. the Median upper terminus
ix. the Lydian years of dating
x. the regnal years of Kroisos
xi. the Assyrian upper terminus
xii. historical critique (a) Herodotus' sources for Mesopotamia
(b) Median, Mannian, Armenian sources
(c) dates for Kyros and the fall of Sardis
(d) the Lydian kingdom
xiii. characteristics of the Herodotean chronography of Asia

i. Herodotus' absolute dates for Persian reigns

All Herodotus' Asiatic dates depend on his Persian reckonings, and these on the date of Marathon, for Dareios died in the year after the Egyptian revolt, after a reign of 36 years (7.4) and Egypt revolted in the fourth year after Marathon(7.1). Reckoning Marathon early in the Athenian year 490, the years are: first, 490-89; second, 489-88; third, 488-7; fourth, 487-6: the Egyptian revolt; fifth, 486-5: the death of Dareios in his 36th year.[9] His

9. According to the Babylonian material, Dareios died soon after October 12th 486, and Xerxes had acceded by December 1st. So April 485 began Xerxes' first year: G.G.Cameron AJSL 58(1941) pp.314ff. The Egyptian material confirms that Xerxes' first year was 485/4 B.C.: R.A.Parker ib. pp.285ff

first year is then 521 B.C. in monadic years. His predecessors are dated:

(3.66-7) Kambyses and the pseudo-Smerdis reign 8 complete years: 529-522
(1.214) Kyros reigns 29 years: 559-30[10]

10. According to the Babylonian sources, Kyros took Babylon in October 539. Kambyses was appointed king in Babylonia April 530, and succeeded Kyros in Persia in September. His Herodotean reign of 7 years 5 months is correct, and represents 6 months of 530/29 (his accession year), plus 6 years, plus 11 months of 523/2: W.H. Dubberstein AJSL 55 (1938) pp. 417ff., G.G. Cameron, op.cit.

ii. calculated dates for Median reigns

The succession of the Persian to the Median empire is told by Herodotus as the story of Harpagos' revenge, without any statement of overlap between the reigns of Astyages the Mede and Kyros the Persian. We may then at this stage assume that the last chronographic year of Astyages immediately preceded the first chronographic year of Kyros, and date the Herodotean Medes:

(1.102)	Deiokes	53 years:	708-656
(1.102)	Phraortes	22 years:	655-634
(1.106)	Kyaxares	40 years:	633-594
(1.130)	Astyages	35 years:	593-559
Kyros' first Median year:			558

iii. calculated dates for the Assyrian and Median empires

The Assyrian empire lasted for 520 years (1.95) and ended when the Medes revolted under Deiokes: its dates are therefore 1228-709. There followed the (unnumbered) years of Deiokes as judge, before the building of Ekbatana and the establishment of the Median empire. The Median empire lasted 128 years, ending with Astyages, and including in the 40 years of Kyaxares the 28 years of Skythic empire. We therefore have the dates:

Assyrian empire	1228-709
(22)unpaid years of Deiokes	708-687
Median empire	686-559

iv. calculated dates for the Lydian kings

The Lydian history of Herodotus begins with the accession of the Herakleid Agron, son of Ninos son of Belos. This remarkable genealogy suggests that Herodotus intended his Lydian and Assyrian histories to share an upper date. The figures which follow from this suggestion are:

(1.7)	Herakleidai:	505 years	1228-724
(1.14)	Gyges	38	723-686
(1.15)	Ardys	49	685-637
(1.15)	Sadyattes	12	636-625
(1.25)	Alyattes	57	624-568
(1.86)	Kroisos	14	567-554
Kyros' first Lydian year:			553

v. chronographic generations

The four imperial generations of Media total 128 years, and so average 32 years. The first pair, and the last pair (including the 22 unpaid years of Deiokes) each make 75 years.

The first four Mermnad generations in Lydia (Gyges to Alyattes) total 156 years, which gives an average of 39 years. The total number of regnal years in Lydia is 675, which equals 27 x 25: but the number of Herakleid and Mermnad generations counted is 27, i.e. 25 years to the generation.

vi. the generation count in Mesopotamia

Herodotus names the following Mesopotamian rulers:

(1.184) Semiramis is five generations before Nitokris
(1.188) Nitokris is the wife of Labynetos I and mother of Labynetos II, the last king of Babylon before Kyros
(2.141) Senacherib contemporary with the Egyptian generation before Psammetichos
(2.150) Sardanapalos was robbed of his royal treasures.

Senacherib and Sardanapalos are not dated in relation to the other Mesopotamian rulers, of whom the two queens, Semiramis and Nitokris, are the most important for understanding the Herodotean view. He calls both queens of Babylon (which suggests an ultimately Babylonian source) and places them five generations apart. This leads to the identification of the two queens with the two Assyrian queens-regent, Sammuramat and Naki'a :

811-09	Sammuramat, regent	1
808-783	Adad-nerari III	2
782-727	Assur-dan III Tiglath Pileser III	3
726-705	Sargon II	4
704-681	Senacherib = Naki'a	5
680-669	Esarhaddon	
668-633?	Ashurbanipal	
633?-612	two sons	

The date when Nakia was appointed regent is uncertain, but she was ruling there when her son was king, which was 681 in Babylon, 680 onwards in Assyria. The historical time from 680 to the death of Dareios in 486 is 195=39 x 5 years, and to this period Herodotus assigns five reigns:

1. Nitokris and Labynetos I
2. Labynetos II
3. Kyros
4. Kambyses
5. Dareios

This is probably the basis of his calculation, but it is unsatisfactory in two respects. The first was probably of no concern to Herodotus: it is that Nitokris and her husband represent the four historical generations of Esarhaddon and Ashurbanipal of Assyria, and Nabopolassar and Nebuchadnezzar II of Babylon. The second is that, with Kyros acceding in Babylonia after 553 (his first Lydian year), the third generation in this list begins more than 120 years after Nitokris in 681/0.

vii. synchronisms by generations

The manner in which this difficulty was solved is revealed by a table of synchronistic generations for Mesopotamia, Persia, Media, and Lydia, as follows:

1.	Achaimenes (7.11)				(Sammuramat) Semiramis	
2.	Teispes I				(Adadnerari III)	
3.	Kambyses I			Gyges	(Assurdan III)	
4.	Kyros I		Deiokes	Ardys	(Sargon II)	
5.	Teispes II (1.111)	.	Phraortes	Sadyattes	(Senacherib)	
6.	Ariaramnes	Kyros II	Kyaxares	Alyattes	(Esarhaddon)	Nitokris
7.	Arsames	Kambyses II	Astyages	Kroisos		Labynetos II
8.	Hystaspes	Kyros III				
9.	Dareios	Kambyses III				

Herodotus does not connect his two Persian genealogies by making Kyros II the son of Teispes, but this placing may be inferred from the appearance of Kyros I in the other line, who would then

be Kyros II's grandfather. (Dareios in his inscriptions counts Kyros III and Kambyses III as men of his family, and makes Teispes II the son of Achaimenes, thus omitting three generations found in Herodotus. But since Achaimenes was the phratric eponym (Hdt.1.125) "son of Achaimenes" is perhaps not to be taken too literally. See further chapter VIII below.) The three conquests of Kyros - Media, Lydia, and Babylon - are represented by Astyages, Kroisos and Labynetos II and are placed in one generation, so that (1) Deiokes of Media is contemporary with (Sargon II) in Assyria, (2) Gyges is contemporary with (Aššurdan III), and (3) Achaimenes is contemporary with Semiramis. Of these, Gyges was historically contemporary with Assurbanipal (the son of Esarhaddon), who is the protonym of Sardanapalos. But the Ktesian mythology of Sardanapalos makes him defeated by Arbakes the Mede five generations before Deiokes, so that Ktesias' Sardanapalos is not Aššurbanipal. Hellanikos expressly stated that there were two Sardanapaloi. These non-Herodotean evidences suggest that the Herodotean Sardanapalos may come from this same tradition of an older king than Aššurbanipal, and since historically the reign of Aššurdan III was marked by the decline of Assyria in the face of the rising Urartian kingdom, it would seem that Herodotus has places Gyges in that generation by identifying the two Sardanapaloi: Hellanikos's statement may then be part of a polemic against the Herodotean view. In that case, the Sardanapalos of Hdt. 2.150 may be placed in the Mesopotamian generation contemporary with Gyges.

In the Herodotean scheme, Deiokes of Media is contemporary with Sargon II, and the protonym of Deiokes is Daiaukku of Mannai, who

conspired against both his king and his Assyrian overlord, in alliance with Rusas of Urartu, and with his family was transported to Hamath in 715 B.C. Thus Herodotus' correct generation-count from Semiramis (Sammuramat) to Nitokris (Nakia) seems to come from a source which includes the correct placing (by generations) of Deiokes (Daiakku); the incorrect placing of Gyges comes then from another source. A third source is indicated by the placing of Senacherib in the generation before Psammetichos, who is five generations (in Egypt) before Kambyses III.

If we now construct a table of synchronistic generations based on Mesopotamian historical reckonings, it reveals the gaps in the Herodotean version:

1. Sammuramat (Semiramis)				
2. Adadnerari III				
3. Assurdan III				
4. Sargon II	Deiokes		Achaimenes	
5. Senacherib m. Nakia			Teispes I	
6. Esarhaddon: Nakia regent		Gyges	Kambyses I	
7. Assurbanipal		Ardys	Kyros I	Psammetichos
8. Nabopolassar	Phraortes	Sadyattes	Teispes II	Necho
9. Nebuchadnezzar II, etc.	Kyaxares	Alyattes	Ariaramnes	Psammis
10. Nabonidus (Labynetos II)	Astyages	Kroisos	Arsames	Apries
11. Kyros III			Hystaspes	Amasis

The gaps are therefore: generations 7,8 and 9 in Mesopotamis, and 5, 6 and 7 in Media. Gyges (his accession) is 3 generations lower than his Herodotean date, and Achaimenes also.

By comparing the Herodotean and historically-based synchronistic tables, it is possible to make some inferences about the sources and methods of Herodotus. His source was correctly informed on the history of Assyria and Mannai for the first five generations. Then there is a complete gap of three generations before the history of Media begins with Phraotes. In Babylonia, Nakia is remembered for

the first of these three generations: the next three, including that of Phraortes, are a blank. From this it may be inferred that the Greek development of the history of this period begins with the translation of the 195 years from Nakia to Xerxes into 5 generations. Behind the Greek development there is a Median development drawing on two sources (1) Median proper, form Phraortes onwards, and (2) a tradition of the Assyrians and Mannai, of whom the latter were in the eighth and seventh centuries a community distinct from the Medes. Finally, there is a source, which may be Persian, which is responsible for the statement that from Nakia to Xerxes' accession was 195 years. The combined Median-Mannian tradition omits two generations, those of the historical Assurbanipal and Nabopolassar: these are roughly equivalent to the time when the communities north and east of Mesopotamia became free, and no empire was exercised over them. In the early years of this period, the Median tribes were disunited, and probably the same is effectively true of the Mannai. It would seem probable therefore that this period of tribal organisation has been identified with the movement towards national independence under Daiakku, and that it is described by the 22 years assigned by Herodotus to Deiokes the judge.

viii. the Median upper terminus

The Greek development of Persian tradition began, we have suggested, with the transmutation of the 195 years after Nakia into 5 generations. Further knowledge of the Persian royal genealogy seems to have led to the realisation that Kambyses III and Dareios I represent only one generation: consequently it would be inferred that the generation before Nitokris' reign

should be the first of the five generations. Deiokes then belongs to the generation before the first of the five, and Herodotus duly dates him to 708 B.C., which is 681 plus 27 x 1. This then was the final generation count of Herodotus, and generations before 681 are reckoned by him at 27 years. Consequently, model dates for the Herodotean history of Mesopotamia, Media, Mannai, and Persia are:

1. Achaimenes	Semiramis		1. 789	
2. Teispes I			2. 762	
3. Kambyses I	Sardanapalos		3. 735	
4. Kyros I		Deiokes	4. 708	
5. Teispes II	Senacherib	Phraortes	5. 681	1.
6. Ariaramnes	Mitokris	Kyaxares	642	2.
7. Arsames	Labynetos II	Astyages	603	3.
8. Hystaspes			564	4.
9. Dareios			525	5.

ix. the Lydian years of dating

The Herodotean figures for Lydia show the fact that much labout and historiographic thought had already been spent on the Mermnad dynasty by the time of the writing of Book I. This development may be set forth as follows:

a) Three data form the basis of the Herodotean scheme:

i. the first Lydian year of Kyros in 553 is 27 x 2 years before 499, the Ionian revolt. This is an arithmetical statement of the general experience that the men who fought in 499-4 were able to say that their fathers or mothers, uncles or aunts, were born the year "the Mede appeared".

ii. the upper terminus in 1228 is 27 x 27 years before 499. On the other hand, the 27th Lydian royal generation is Kroisos. These two facts suggest particularisations from a general and more vague tradition of 27 generations of Lydo-Ionian

history before some time later in the sixth century.

iii. the accession of Gyges in 723 is 27 x 9 before 480: this then may be a mainland reckoning. Nine generations before the Persian wars is also the date for Syracuse. (See below Chap. VII) ~~xxxx

have the following:

723	739		Gyges
696	712	714	
669	685	675	Ardys
642	658		
615	631	636	Sadyattes
588	604	597	
561	577		
534	550	558	Kyros in Media
507	523	519	
480	496	480	

Since the accession date and regnal years of Kroisos are determined by the formula 723 = 514 plus 39 x 5 14, only the accession date of Alyattes (or the regnal years of Sadyattes) now remain to be accounted for. Sadyattes in 636 = 597 plus 39 x 1, and Alyattes is placed at 624 = 597 plus 27 x 1: the two are thereby described as acceding in the same generation. But this method of using 39 and 27 year reckonings in the same generation and dynasty is primitive, and probably due to the fact that the third of a generation had not yet been invented.

x. the regnal years of Kroisos

The Herodotean attribution of 14 regnal years to Kroisos is due to the formula 723 = 514 plus 39 x 5 14. The Herodotean narrative of the last years of Kroisos is not, however, necessarily from the same source as the 14 regnal years. These last years of Kroisos are marked in the narrative as follows:

559: fall of Astyages
558: first Median year of Kyros
Kroisos tests the oracles and sends gifts to Delphi: Apollo intercedes with the Fates (1.91)
557: year of the originally fated end of Kroisos (1.91)
556: first extra year of Kroisos
555: second extra year of Kroisos
554: third extra, and last, year of Kroisos, three years after his originally fated end (1.91) = fifth Median year of Kyros
553: first Lydian year of Kyros = sixth Median year of Kyros

This relative dating of the fall of Media and Lydia to Kyros seems

to be due to Delphi, and may possibly be accurate.

xi. the Assyrian upper terminus

The year 1228 seems to be the common upper terminus for Lydia and Assyria in the Herodotean scheme, and to rest upon the particularisation of a general tradition of 27 generations of Lydo-Ionian history. It is not a year of importance in the Assyrian annals so much as in Babylonian, for it was probably the year in which Tukulti-Ninurta I of Assyria destroyed the Kassite power in Babylonia.[11] It thus repeats the general Babylonian flavour of Herodotus' Assyrian notices which has already been observed in his treatment of Semiramis as a Babylonian queen.

11. CAH 2.242, adjusted to Poebel's dates for Tukulti Ninurta I

xii. historical critique of the Herodotean scheme (a) Mesopotamia

The Herodotean version draws on a source which knew of the fall of the Kassites, the regencies of Sammuramat and Nakia, the rule of Nabonidus, and (as we have seen) the length of reign attributed to the pretender Nebuchadnezzar III. This last curious detail confirms the Babylonian flavour of all his Mesopotamian information, and suggests that his source had access to official archives. The candidate is Zopyros (Wells: Studies in Hdt., p.95).

(β) Mannai and Media: The dating of Deiokes to his correct generation in Assyrian terms suggests that Herodotus' source was the same as for Mesopotamia. His Median traditional history proper begins with Phraortes. The conquest of Media by Persia, on which the other Median datings rest, is placed by Babylonian contemporaries and successors in 553 or 550 B.C. On these bases, the Herodotean regnal years for Media give the following dates:

650 or 647 Phraortes: 22 years
628 or 625 Kyaxares: 40 years
588 or 585 Astyages: 35 years
553 or 550 first Median year of Kyros

Assuming the accuracy of the Herodotean reckoning of regnal years, the lower dates are to be preferred for two reasons:

i. the war with Lydia waged by Kyaxares ended at the eclipse in May 585 B.C., that is, in the monadic year 586. Astyages would, in 585, succeed Kyaxares in the year after the battle.

ii. the Skythic invasion, which interrupted the siege of Nineveh by Kyaxares and began the 28 years of Skythic empire, occurred in 613 B.C. Some of these Skyths came to Lydia, and their presence was the cause of the Lydo-Median war. The 28th year after 613 B.C. is 586, so it was apparently to this period, including in its last years the Lydian war, that the 28 years of Skythic "empire" originally belonged.

On this reckoning, Kyaxares becomes king of Media in 625, the same year as Babylonia became independent of Assyria. It seems probable therefore that the 22 years after the fall of Assyria were originally the 22 years of the reign of Phraortes, and that when the Medes retrodated their imperial period, and adopted the Mannian Deiokes as their founder, the 22 years were attributed to his tenure of judgeship. The 31 imperial years of Deiokes given him by Herodotus completes the average of 32 x 4 to make the Median dynastic figures.

γ) Kyros and the fall of Sardis

The Delphic dating of the years from the fall of Astyages to the fall of Kroisos gives the following absolute dates according to the above reckoning:

550: first Median year of Kyros
549: year of the originally fated end of Kroisos
546: last year of Kroisos: fall of Sardis
545: first Lydian year of Kyros

The year 558 for the accession of Kyros is chronographic, and = 480 plus 39 x 2: Herodotus therefore did not know the length of Kyros' reign.

§) Lydian history

Apart from Assurbanipal's record of Gyges, and his notice that Lydia sent an embassy about 640 B.C., our detailed knowledge of Lydian history comes from the Greeks, especially Herodotus. The work of Xanthos of Lydia is lost, and none of the lists of regnal years in the various Kanones seems to be historically based. Kroisos is not certainly to be identified with the king of Lu.... west of the Tigris, whom Kyros killed in 547 B.C.

The fixed points in Lydian chronology are therefore (1) the death of Gyges during the years 652-44, probably in 652; (2) the eclipse battle in the reign of Alyattes, May 585; (3) the fall of Kroisos in the years around 546. For the last four generations, Herodotus gives 152 years, but the historical maximum is 112, and the probable 106 years: Herodotus has added at least 20 years.

The durations of some events are given by Herodotus during the reigns of Sadyattes and Alyattes. Sadyattes fought with Miletos for 6 years, and this war was continued by Alyattes for another 5: in the 6th year Alyattes made peace with Thrasyboulos of Miletos, an ally of Periandros of Corinth. Alyattes' war with Media ended in the sixth year at the eclipse battle in 586 (May 585): the first Median campaign was therefore in 591. It is obvious that the two six-years' wars may be contemporary: if Alyattes was

using the Skyths against Media, he may also have used them against Miletos; so the narrative cannot be used to place Alyattes' accession before 591. Sadyattes is given only 6 years of activity: so the narrative does not with certainty carry us back before 597. This leaves the second half of the seventh century for Ardys, who must have subdued the Kimmerioi to some extent by the time he could send an embassy to Assurbanipal about 640. The Herodotean attribution of two generations to Ardys is therefore approximately correct.

After the first six years, Herodotus gives no information about the reign of Alyattes other than that he warred with some of the Greeks and drove out the Kimmerioi (= Skyths?). This activity probably included the reduction of the nations west of the Halys which Herodotus attributes to Kroisos, perhaps because that king had some fighting east of Sardis on his accession, as he had with the Greeks.

Herodotus seems to conceive of the events of Kroisos' reign on a time-scale like the following:

567: accession: quarrel with Ephesos	(559
566: alliance with the islanders	(558
565/2: the glory of Kroisos	} (557/4
[illegible] {Solon's visit	} ([illegible]
560/59: death of Atys, and mourning	(552/1
558/4: preoccupation with Media	(550/46

We shall return to the visit of Solon when discussing Herodotus' Athenian chronography: meantime we may note that there is no non-chronographic evidence in our sources for the length of Kroisos' reign. The approximate historical dates for the Lydian kings are:

Gyges died about 652
Ardys reigned about 650-00
Sadyattes reigned about 600-591
Alyattes reigned about 591-561
Kroisos reigned about 560-546

xiii. characteristics of the Herodotean chronography of Asia

The most notable single characteristic is the appearance of a "horizon" at the beginning of the ninth generation before the Persian wars, in Persia according to the Achaimenid genealogy, in Mesopotamia according to the generation-count, and in Lydia according to the upper terminus of date selected for Gyges. This is a very formal historiographic concept, and ill suits the Asiatic material, from which it can hardly be derived. The source of the notion may then be taken as Greek, and in Greek tradition this ninth generation marked an important era, the foundation of Syracuse. It is possible therefore that not only was the notion Greek in origin, but west Greek and Pythagorean, though Herodotus may have encountered it before he went to Thourioi.

Another characteristic of the scheme is the evidence for two layers of work in the chronography of Mesopotamia and Lydia, both imposed on underlying native tradition, the Mesopotamian being literate, and the Lydian probably not. In Mesopotamia, the simpler of the two levels transmutes 195 years into 39 x 5 generations; in Lydia, the base-date 480 (for the nine generations back to Gyges) belongs to this stratum. The second stratum of work creates the second generation-count in Mesopotamia, the upper terminus for Media, and the use of the base-date 514 for the Lydians. It seems likely that this chronography is the work of Herodotus himself, if thereby we mean that Herodotus applied the principles of the Chronographic Model to his Asiatic material: the 39-year generation of the Model is presupposed by the first of the two layers in the Mesopotamian chronography.

The purpose of this reworking of the Lydian and Mesopotamian dates is most clearly seen when the model dates of the Chronographic Model are compared with the Lydian and Mesopotamian generations:

714	Eurykrates	Gyges		
675	Anaxandros	Ardys	Senacherib	(2nd Messenian War)
636	Eurykratides	Sadyattes	Nitokris	
597	Leon	Alyattes	Labynetos II	
558	Anaxandrides II	Kroisos	Kyros	
519	Kleomenes		Dareios	

Thus the Herodotean scheme for Lydia maintains the nine-generation horizon and also places Gyges in the generation between the Messenian Wars in relation to Spartan history; in Mesopotamia, Senacherib becomes available at the time required for a predecessor of Psammetichos. The whole scheme is therefore a highly elaborate series of adjustments and synchronisms, making the utmost use of traditional (literate and other) data, and placing the greatest possible strain on the most recent developments of chronographic theory and technique available to Herodotus.

E. Naturalistic and chronographic datings in the "embassy reports" etc.: Corinth, Athens, Sikyon, Argos.

i. Corinth

From the Samian expedition onwards, Corinthian history is the history of the Peloponnesian League, and (in foreign policy) not distinguished from that of Sparta, even in the case of the armies in Boiotia in about ?514 (see note 8 above). Earlier Corinthian history appears in:

i. the "annotated annals": Kypselos and the early years of Periandros (5.92
ii. the Lydian history: Periandros and the Milesian war (1.20)
Periandros and Arion (1.23)
iii. the "annotated annals": Periandros and Sigeion (5.94)
iv. the Samian expedition: the last years of Periandros (3.50ff)

The only dates contained in these accounts are:

(5.92) Kypselos ruled 30 years
(1.20) Periandros had acceded by the 6th year of Alyattes = 619 in Herodotean years
(3.48) Periandros despatched boys to Alyattes not later than 568 in Herodotean years, which is
(a) the generation before Samos, i.e. before the time of Kambyses 529-22
(b) about the time of the seizure of the winebowl, 554

The 39-year generation before 529 began in 568, and 554 is in its first half: the awkwardness of the expression shows the technical difficulty of operating without the third of a generation, when a generation is as long as 39 years.

The Herodotean Periandros thus reigns from (x plus) 619 to 568 (minus y), that is, 52 (plus z) years: whence Kypselos accedes in 649 (plus x). As Lykophron was 17 at the time of the quarrel with his father (3.50ff), he was, on this calculation, in Korkyra by at latest 600. The other events are undated.

As the Corinthian dates depend on the Lydian chronography, they are chronographic derivatives in form. The relative dating

may however be naturalistic, and, assuming this, we could argue (1) the sixth year of the Median war of Alyattes was 586/5: and this war seems to be the final episode in the "Skythic empire". The six years' Milesian war may have been contemporary with the Median war, that is, we cannot positively date Alyattes earlier than 591, or Periandros earlier than (x plus) 586. (2) The regnal years of Kroisos in the Greek sources vary from 16 to 14. If Sardis fell in 546, he acceded not earlier than 561: the last year of Alyattes is then 562. Periandros then dies in 562 (minus y). The dates then are:

Alyattes c591-561	Kypselos (x plus) 615 - 586
Kroisos c561-546	Periandros (x plus) 586-562(minus y)

ii. Athens

Apart from the history of the Persian campaigns, the Herodotean history of Athens covers the following subjects:

(a) the Athenian state:
  i. Peisistratos before 554 (1.59ff: the "embassy report" to Kroisos)
  ii. the fall of his sons (5.55ff: the "annotated annals")
  iii. Kylon (5.71: the "annals")
  iv. Sigeion (5.94: the "annals")
  v. the Ionian revolt (in the "annals")
  vi. the Aiginetan affairs, of 504 (5.89 in the "annals")
    of 491 (6.49, in the tragedy of Kleomenes)
    of 489-1 (6.85ff, in the same)
(b) the ancestors of Kimon II: 6.34ff, 6.103
(c) the ancestors of Perikles: 6.121ff, 1.59ff
(d) Solon, in relation to Kroisos : 1.29ff
    Amasis: 2.177
    Philokypros: 5.113
    (Anacharsis: 4.76f)

The dates stated or inferred from the narrative of these events and persons (apart from simple generation-dating) are:

(1.62) second exile of Peisistratos ends in the 11th year: 565-55
(1.63.5) third tyranny in being by the time of Kroisos' embassy: 555
(5.65) the sons of Peisistratos rule 36 years: 545-10
(5.55-96) the "annotated annals" for 514-00
(6.49) the medism of Aigina: 491
(6.85ff) the Aiginetan war 489-1

It is notorious that the Herodotean datings are very different from those in later sources, particularly Aristotle (for Solon and Peisistratos) and Sosikrates (for Solon). Moreover, the latter disagree among themselves, Aristotle in the Athenian Constitution differing from Sosikrates in the dating of Solon, and in the same differing from his own figures for the tyranny in the Politics. Two problems therefore arise, first, whether there were written sources for sixth-century Athenian history; and second, the historiography of the tyranny and the revolution.

α. Possible written sources for sixth-century Athenian annals.

(a) Hippias was famous for his collection of oracles. Their study would involve much historical work, for determining which of them had already been fulfilled. But these papers were removed from the temple by Kleomenes in 508 (5.90)

(b) The records of the early democracy would be seriously depleted by the Persians in 480/79

(c) Pherekydes and others may be responsible for genealogies which noted archons and events; and for archon-lists constructed on the basis of surviving archives, and living memory for the last years of the sixth century, and genealogical chronography for the preceding years. Their work would establish a fifth-century version: and one problem is whether both Herodotus and Aristotle drew on this. From the variable dates for Solon ~~xxxxxxxxx~~ we may infer either that Solon was not archon eponymos, or that various lists were in circulation. We have seen however that the date of the first annual archon (683) was probably fixed by the time of Hippias of Elis; and we shall see reason to believe that the list for the seventh and sixth centuries was made up by the placing of names believed correct on the strength of family tradition: a large number of people who were at one time and another thesmothetai may have crept into the list of eponymoi in this way.

β. Historiography of the tyranny

In all the versions of dating for Peisistratos it appears that the tyrant spent little more than half his active political life in Athens. His other interests included property in Thrace, developed during his second exile (Ath.Pol.15); the principality

of Sigeion, acquired before the death of Periandros (Hdt. 5.94); the principality of the Chersonese, which he sent Miltiades II to rule (6.35); Naxos, which he gave to his client Lygdamis (Ath. Pol. 15.3; Hdt.1.64), perhaps in his third tyranny. Miltiades of the Chersonese had friendly relations with Kroisos (6.37), but after 546 his relations with Persia are obscure: by 513(?) Miltiades III is a Persian vassal. The Chersonese was in Europe, but Sigeion in Asia, so that relations between the owners of Sigeion and the empires of Lydia and Persia might be expected to be close; we have no information whatever about the status of Sigeion in this respect: it has no representative mentioned on the Danube in 513(?) (4.138): indeed, Aristotle (Ath.Pol. 18) makes its prince Hegesistratos or Thessalos active in Athens in 514. In these circumstances, judging the actions of Peisistratos presents the same kind of problems as if we had to estimate the policies of the Anglo-Norman kings in the absence of any information about their French connections.

1. non-Athenian interests of Peisistratos

Judgement on the various datings for Peisistratos should therefore first be concerned with tracing out the development of his non-Athenian interests, for it is in this region of his activity that we may find indications of date relative to more securely established events.

The acquisition of Sigeion should belong to his early years, if we accept the evidence of Herodotus for an arbitration by Periandros before 562(minus y). With this, geographically, and because of the synchronism with Kroisos (c561-46), belongs the despatch of Miltiades II, son of Kypselos and probably great-nephew

of Periandros, to the Chersonese.

The context of these interests is Corinthian and Lydian. In his later years, Periandros had friendly relations with Lydia (3.50ff) and Kroisos assists Miltiades against Lampsakos. Peisistratos, in his first tyranny or first exile, married Timonassa, the widow of Archinos the nephew of Periandros; her son Hegesistratos received Sigeion from his father Peisistratos. These Athenian principalities in the north-east Aegean which devolve upon relatives of the Kypselidai are very similar to the colonial possessions of the Kypselidai themselves, which were ruled by the brothers of Periandros (Ambrakia, Leukas, Anaktorion), by his sons (Korkyra and Potidaia), and nephews (Korkyra, Ambrakia). The large kinship group, larger than the anchisteia, seems to have been an old instrument of Corinthian policy, invented by the Bacchiadai, adopted by the Kypselidai, and now in the last years of Periandros extended to the Athenian members by descent or marriage, just as the Kypselidai themselves were descended from the Bacchiadai in the female line.

A close association between Peisistratos and the Philaidai in these early years is marked by the Corinthian associations, and the common interest in the north-east; it is supported by the fact that the Philaidai do not appear as the leaders of one of the three "factions" before the tyranny, probably because they were supporters of Peisistratos: and, as we shall see, by the chronographic association in Aristotle's source, where Hippokleides the Philaid is archon in 566, and Peisistratos seizes the akropolis in 565. Peisistratos and the Philaidai may then be taken as the Corinthian party in Athens during this period of general Attiko-

Corinthian eunoia.

The marriage of Timonassa to Peisistratos also resulted in a close association with Argos during the early years of Peisistratos; and this implies that Corinth and the Argive League were on friendly terms at this period. Timonassa's son Thessalos (Hegesistratos) bears a surname which suggests acconnection between the Argive and Thessalian alliances of Peisistratos; and the Macedonian connection may have been encouraged both by the Argive origins of the Macedonian kings and the Corinthians at Potidaia.

The notable omission in this list is Boiotia; and it may be similarly remarked that it is during the last years of Periandros, and in the reign of Kroisos, that Samian piratical activities are said to turn against Corinth and Sparta, about the time, then, of the Sigeion arbitration as dated by Herodotus' synchronisms.

During his second exile, Peisistratos was at Rhaikelos on the Thermaic gulf, and in Thrace. He use Eretria as his base for the final attck on Attika, and was assisted by a party of Naxians under Lygdamis.[12] During his third tyranny, apparently, Peisistratos established Lygdamis as tyrant in Naxos, and purified Delos. Both Argives and Thebans, as well as Naxians, helped in the establishment of the tyranny, which, in the Aristotelian view, must have been contemporary with the rise of Polykrates in Samos; but although the influence of Peisistratos reaches as far east as Naxos, he is not mentioned as having any relations, friendly or hostile, with Polykrates.

12. The basis of a kouros named Kroisos may be part of a monument to a Naxian or other Ionian youth who fell at the battle of Pallene: Richter, Kouroi.

It seems that during his second exile, Peisistratos did not go to Sigeion which ,in the Aristotelian view, would now be in Persian territory. This implies a definite avoidance of vassalage to Persia, and may mark the time when Peisistratos handed over Sigeion to Hegesistratos. The situation of the Philaid principality is rather different: the feud with Lampsakos continued into the Persian period, far into it according to the Aristotelian dating, and just entering it according to the Herodotean (6.38); Lampsakos was a colony of Phokaia, an important enemy of the Persians in the years after 546. It would be natural for the Philaidai to seek Persian, as they had previously received, Lydian support: they had medised by 513.

We now come to a crux in the Herodotean narrative of Peisistratos, which appears to assert that Kroisos passed over Athens in favour of Sparta in 554, because Peisistratos was then tyrant (1.59). This assertion is not be reconciled with Lydian assistance to Miltiades, or Lydian friendship with Corinth, and must be regarded as unhistorical. The contrary evidence suggests that Kroisos was already closely related to the Athenians of Peisistratos' party and the Alkmeonids (6.125), and that the alliance with Sparta was additional to this. But if the assertion is unhistorical, the synchronism of a tyranny of Peisistratos and the embassy from Kroisos (in 554 = 547) breaks down; indeed it would appear more probable that Kroisos refrained from formal relations with Athens because Peisistratos was not there.

The relative dating of the non-Athenian interests of Peisistratos may then be summarised:

first tyranny and first exile	Sigeion, Chersonese, Argos, Thessaly, Macedon. Close association with Corinth and Lydia Possibly in exile in 547
second tyranny	
second exile and third tyranny	Rhaikelos in or near Macedon, Thrace, Eretria, Boiotia, Naxos, Delos. Probably in the Persian period, Sigeion is handed to Hegesistratos.

2. Dates given to Peisistratos and his sons: . The Herodotean dates

In 5.65 Herodotus says that the Peisistratidai had ruled for 36 years when they were expelled. Similarly, in 1.65 Herodotus clearly states that Peisistratos was in his third tyranny at Athens, and had already enthroned Lygdamis in Naxos and purified Delos, before the arrival of Kroisos' embassy, which, on Herodotus' own careful dates in this book, falls in the years 558-4. This is consistent with the dating of Hippias' accession in 545, and with the apparent assertion that the Lydian alliance was lost to Athens because of the tyranny. But this, as we have suggested, was probably unhistorical, and the reason why the assertion was made is not perhaps far to seek. If the Philaidai of the sixth century collaborated with Peisistratos, they would be anxious in the fifth to disown the fact; and from this source there probably comes this assertion about Lydian policy,[13] as well as the story that Kimon I was murdered by the Peisistratidai, and the noble sentiments attributed to Miltiades III on the Danube in c513.

13. Kastor's use of 547 for the base date of Pelasgian chronography suggests that the Philaid friendship with Kroisos was placed in that year, and that it was afgued that Peisistratos, in his role of enemy of the Philaidai was then in Athens, and that Kroisos was so friendly to Miltiades as to be hostile to his Athenian as well as his Lampsakenian enemies.

The result, however, of Herodotus' historiography is to give

the dates:

first reign, first exile, second tyranny:	before 565 (at latest)
second exile, for 10 years:	565-556 (at latest)
third tyranny (fall of Sardis 554)	555-546 (at latest)
Peisistratidai	545-510

This dating, as we have seen, is historically unconvincing; and the question arises of its relationship to the other traditions of Peisistratean dating. It used to be assumed that Herodotus does not represent an independent tradition, but that his 36 years of Peisistratid rule was a figure for the regnal years (i.e. omitting the exiles) of both Peisistratos and his sons. Recently, it has been generally held that the 36 years represent the period of continuous tyranny from the battle of Pallene (i.e. Peisistratos' third reign) onwards; this view rests partly on the assumption that Herodotus dated the fall of Sardis to 546 B.C. But, as we have seen, there is no evidence for this assumption, and arguments from the internal consistency of Herodotus' first book lead us to conclude that he dated the fall of Sardis to 554. The question of the relationship of the Peisistratean dating offered by Herodotus, to the other traditions therefore required re-examination.

(b) Traditions of Peisistratean dating; the expulsion of Hippias

The evidence for all Peisistratean dates rests on the date of the battle of Marathon, which we may assume to have always been regarded by the ancients as falling in 490 B.C.[14] According to

14. Munro in CAH IV.232f proposed the date 491 B.C. His error of argumentation is fully set forth by Cadoux, JHS 68(1948) p.117 note 253

Thucydides 6.59, this was in the 20th year of Hippias' exile, so that the 20 years of the exile as 509-490. Thucydides also

says that after the murder of Hipparchos, Hippias ruled for three years, and was expelled in the fourth. The reckoning is therefore in monadic years throughout:

514: year of the murder of Hipparchos
513-11: three years of Hippias' sole rule
510: year of expulsion of Hippias
509-490: 20 years of Hippias' exile.

Herodotus 5.55 says that Hippias reigned for not less than 4 years after the murder of Hipparchos, that is, from 28th Hekatombaion (or later) 514 to the 28th Hekatombaion (or later) 510 B.C. Thus both Thucydides and Herodotus seem to think of Hippias' reign as ending during the first few weeks of 510.

Aristotle in Pol.5.9.23 gives Hippias 18 years of reign, and in Ath. Pol. 19.6 he allows 17 years μάλιστα , and dates the expulsion to the year of Harpaktides. In Ath.Pol. 21.1 he dates the archonship of Isagoras in the 4th year after the expulsion; and Dionysius 1.74.6 and 5.1.1 places Isagoras' archonship in 508 B.C. Thus we seem to have:

508: Isagoras archon
511: 17th year of Hippias: Harpaktides archon
510: 18th year of Hippias in monadic reckoning, since the (indivisible) year begins with a few weeks of Hippias' rule.

The word μάλιστα in Ath. Pol. 19.6 must therefore be taken to mean "ignoring fractions of divisible years"; and it is proper that in his general treatise Aristotle uses monadic years, and in his work on Athens dates more closely to the nearest complete archon year. It is also to be noted that the phrase Ἁρπακτίδου ἄρχοντος in the usage of Ath. Pol. 19.6 does not mean "when Harpaktides (the man) was in office", but is simply the name of the 17th year of Hippias.

Finally, the Marmor Parium states that it is 248 years since Hippias was expelled, when Harpaktides was archon. The naming of Harpaktides shows that the Parian is following Aristotle or his source, and counting 248 years inclusively from 511 to 264 B.C.

date of the accession of Peisistratos

Neither Herodotus nor Thucydides gives dates for the first accession of Peisistratos, so that our earliest sources belong to the fourth and third centuries. They are:

Arist. Pol. 5.9.23: in 33 years Peisistratos reigned 17, then Hippias reigned 18, making a total of 35 (regnal) years.
That is to say: 18th year of Hippias = 510 B.C.
1st year of Hippias = 527 B.C.
(Philoneos arch) 33rd year of Peisistratos = 528 B.C.
(Komeas archon) 1st year of Peisistratos = 560 B.C.

Marmor Parium: 297 years since Peisistratos acceded, in the year of Komeas.
That is to say, the date is Aristotle's, and equivalent to 560 B.C., so that the 297 years before 264 B.C. are reckoned inclusively. The Marmor thus agrees with Aristotle for the two terminal years of the tyranny, and 297 minus 248 is 49 years.

Arist. Ath. Pol 19.6: the total years of the tyranny were 49 (of which Hippias reigned 17, ignoring fractions of divisible years). The comparison with the MP shows that the 49 years here are reckoned exclusively, and mean the span of time enclosed by the years of Komeas and Harpaktides, 560-511

Eratosthenes ap. schol. Aristoph. Wasps 502: the tyranny lasted 50 years. That is, the years 560-511 are reckoned inclusively, as is proper to a chronographer.

internal dates of the tyranny

The main divisions of time within the tyranny is between the reigns of Peisistratos and his sons, and further subdivisions are

the reigns and exiles of Peisistratos, and the joint and sole reigns of Hippias. Thucydides and Herodotus date the sole rule of Hippias; but for the remaining divisions we are dependent on Aristotle mainly; Herodotus gives 10 years for the second exile; and Eusebius also has testimony to offer. We have already seen that Aristotle dated Hippias' first year of joint rule to 527, and Peisistratos' last year to 528. This agrees with the evidence of the fragment of a fifth-century archon list[15] that Hippias was

15. Meritt, Hesperia 8 (1939) 59ff; cp. Cadoux, op cit p.77

archon in 526, for this imples that On]eto[r was already archon elect when Peisistratos died, i.e. that Hippias'accession is to be dated to the last few months or weeks of the year of Philoneos. Thisssmall fraction of a year is then ignored in the statements of years by Aristotle in both his references.

The internal divisions of Peisistratos' career are thus given by Aristotle:

Politics 5.9.23 : in 33 years, Peisistratos ruled for 17
Ath. Pol. 17.1 : in 33 years, Peisistratos ruled for 19, and was in exile the rest
14.3 : Peisistratos expelled in the 6th year of his first reign
4: returned in the 12th year
15.1 : expelled again in the 7th year
2 : returned in the 11th year

These figures contain the following discrepancies:

(1) between the stated numbers of 17 and 19 regnal years

(2) the ordinal numbers for the reigns and exiles give the cardinal figures:

first reign	5	
first exile		11
second reign	6	
second exile		10
	11	+ 21

The total number of regnal years in the first two reigns is then 11, which leaves 6 or 8 years for the third reign. This calculation shows a discrepancy with another: the total number of

regnal and exilic years up to the end of the second exile is 32, leaving (from a career of 33 years) only one year for the third reign.

The first discrepancy (the remainder of 6 or 8 years for the third reign) is easily resolved by demonstrating the use of two different methods of counting, thus:

1. 1.Peisistratos seizes the akropolis
2. 2. tyrant
3. 3. tyrant
4. 4. tyrant
5. 5. tyrant
6. 6. expelled: 1st year of exile
7 2nd year of exile
8. 3rd year of exile
9. 4th year of exile
10. 5th year of exile
11. 6th year of exile
12. 7th year of exile
13. 8th year of exile
14. 9th year of exile
15. 10th year of exile
16. 11th year of exile
17. 1.12th year of exile: returns: 1st year of second reign
18. 2.Peisistratos tyrant
19. 3. tyrant
20. 4. tyrant
21. 5. tyrant
22. 6. tyrant
23. 7. expelled: 1st year of second exile
24. 2nd year of second exile
25. 3rd year of second exile
33. 11th year of second exile: year of 3rd reign.

Thus the first two reigns may be taken as including years 1-6 and 17-23 inclusive, or years 1-5 and 17-22 inclusive: in the first case, the sum is 13, and in the second 11 years. The subtraction of 13 from 19, or 11 from 17 gives in each case 6 years for the third reign.

One discrepancy therefore remains, that between the stated total of 33 years for Peisistratos' career (supported by the Marmor Parium and Eratosthenes); and the calculated total of regnal and exilic years in which 17 regnal and 21 exilic years

together give a career of 38 years. In terms of years B.C., assumingthat 528 was the last year of Peisistratos, these reckonings give us 560 or 565 B.C. for the beginning of Peisistratos' career.

The discussion of the Aristotelian figures to date has been conceived in terms of historiography versus palaeography, and palaeography has generally been a bad second. We shall discuss the historicity of the figures later; we are concerned here only with the question whether the papyri accurately represent what Aristotle wrote; whether Aristotle's statements made sense or not, or are historically acceptable, are questions needing separate discussion, and are irrelevant to the matter nowin hand. The evidence on this question of the Aristotelian authenticity of the figures falls under four heads:

(1) the evidence from the discrepancy of the totals of regnal years in Aristotle himself, which are accounted for by different reckonings of the detailed numbers. This is neutral evidence, for similar reckonings of other numbers might account for the discrepancy.

(2) the age of our immediate source: the earlier papyrus is dated about 100 A.D. Consequently the immediate source had fewer opportunities of error than many other of our immediate sources. But fewer opportunities does not necessarily mean fewer errors.

(3) the evidence of Herodotus' figure of 36 years. If Herodotus used the date 554 for the fall of Sardis, there is no reason to believe that his figure of 36 years, plus his statement that Peisistratos' third tyranny was in being by that time, represent a genuinely independent Attic tradition. The relative dating of the third tyranny is, we have argued, unhistorical and from a biassed source; its origin seems to lie in the fifth century politics of the Philaidai, and neither in Herodotus' chronographic scheme, nor in the real events of the sixth century. The figure of 36 years should then be connected not with this statement, but with the figure of 10 years given by Herodotus for the second exile. This figure of 10 years is common to Herodotus and Aristotle; consequently it seems probable that the Herodotean 36 years represent the 19

plus 17 years given by Aristotle in the Ath. Pol., which, as we have seen, imply a career of 38 years for Peisistratos, and the authenticity of the papyrus figures.

(4) the evidence of Eusebius. In years of Abraham, this may be presented as follows:

	Arm.	Jer.	Event
A.	1426	1421	Solon
		1423 =	594
		1425	
		1426	
B.	1455	1453	Peisistratos
		1455	goes
		1456	to
		1461	Italy (sic)
C.	1473	1470	Peisistratos
		1471	in
		1474	Athens
		1475	the
		1476	second
		1478	time
		1479	
		1481	
D.	1489	1487	Hippias
	1490	1489	accedes
		1490	
		1491	
		1492	
		1494	
		1495	
E.	1498	1497	Hipparchos
		1498	killed

The events apparently or certainly stated to belong to these years listed here are five:

A. Solon's nomothesia
B. Peisistratos' first exile
C. Peisistratos' second reign
D. Accession of Hippias
E. Death of Hipparchos

The omissions are Peisistratos' first and third reigns and second exile; and in view of these omissions and the very great scatter of dates at each entry, it seems likely that there has been canonographic confusion and coalescence of the various

entries.

In order to discuss the Eusebian figures, we need the following table of years of Peisistratos according to the 33 year and 38 year schemes. The table is constructed by reckoning back from his last year in both cases:

38-year scheme		33-year scheme	Event
1.			First reign begins
7	=	2	First exile: first complete year
17	=	12	Second reign begins
24	=	19	Second exile: first complete year
33	=	28	Third reign begins
38	=	33	Last year
39	=	34	First year of Hippias

With the aid of this table, we may now consider Eusebius' various entries for evidence of coalescence. This is as follows:

(1) B contains the years 1455 and 1461, six years apart: these may represent the beginning of Peisistratos' first reign, and the 1st complete year of his first exile.

C contains the year 1471 (ten years after 1461), which may represent the beginning of the second reign; and 1478 (seven years later) which may represent the 1st complete year of the second exile.

D contains the year 1487 (nine years after 1478) attributed to Hippias, which may represent the beginning of the third reign; and 1492 (five years later, also attributed to Hippias), which may represent the death of Peisistratos.

A contains the year 1423, 32 years before 1455, whereas Aristotle dates Peisistratos in the 32nd year after Solon (see below).

(2) The series of figures in the Armenian place Solon in 591 B.C., which is his Aristotelian date; and the first entry for Peisistratos in 1455, which is 29 years later. This is the interval if we place Solon in 594 (the date given by Sosikrates) and Peisistratos' accession in 565. The Armenian entry C at 1473 gives an interval of 47 years between Solon and the second reign, which is the Aristotelian interval, and entry D gives 1489 and 1490, correct according to the Aristotelian year count for the death of Peisistratos and the accession of Hippias respectively.

Since 1426, 1455, 1489 and 1490 appear in both the Armenian

and Jerome, and the Armenian 1473 is represented by Jerome's 1474, it may be concluded that this series, or its original was present in Jerome Eusebius.

(3) We have seen above that the year 1487 attributed to Hippias might be supposed to represent the beginning of Peisistratos' third reign; but it may also represent the year of the death of Peisistratos: 1473 would then be the year of the second exile, and 1456 the year of the first exile: the entry 1453 (32 years after Solon in 1421) would then represent an attempt to find a year both in the 32nd year after Solon and 6 years before the first exile. Such a series, allowing a 38-year career for Peisistratos ending in 1487 would also account for the placing of the murder of Hipparchos in 1498 by the subtraction of the 38 years from the Aristotelian total of 49 years for the whole tyranny, for 1498 minus 1487 = 11 = 49 minus 38.

It therefore appears that while we have in Eusebius a fair amount of confusion, we also have, in addition, either insanity or a number of attempts to make sense of the Aristotelian figures, in which the general tendency is to reduce the number of years given to Hippias, and in this differing from the general trend of modern speculation.

We therefore have to choose between two hypotheses (1) that the Eusebian figures derive, in several ways, from our text of Aristotle, and (presumably) no more rational source was available (easily, at least) to Eusebius and his commentators; or (2) that the figures in our text of Aristotle have been attacked by a very thoroughgoing disease, that the Eusebian figures are due to canonographic delirium, and that it is a mere coincidence that the Herodotean figure of 36 is the sum of the Aristotelian 19 plus 17. The first hypothesis places fewer strains on credulity, and is much to be preferred.

We have now to account for one figure only, that of 33 years for the career of Peisistratos, stated twice by Aristotle,

and implied by the Marmor Parium and Eratosthenes. There is no question here of textual corruption: the 33-year and 38-year variants are to be taken as genuine variants in the tradition. They may be explained by the following tentative hypothesis.

We know from the evidence of Thucydides that Hippias' last monadic year was 510 B.C.; and it is an obvious calculation that the period 560-510 contains 51 monadic years. We also know from Thucydides that it was normally imagined in his time that the tyranny ended with the murder of Hipparchos in Hekatombaion 514: this is 51 years after 565 B.C. Consequently we may infer that it was established that the tyranny lasted 51 years; and that in the common source it was held to end at the death of Hipparchos. The latter contention was overthrown by Herodotus and Thudydides, but not the former. The original division of the 51 years was 38 for Peisistratos and 13 for his sons: when the extra 5 monadic years (514-510) were added to the latter, the total for the tyranny remained unchanged, so that Peisistratos lost five years, and his total was reduced from 38 to 33 years.

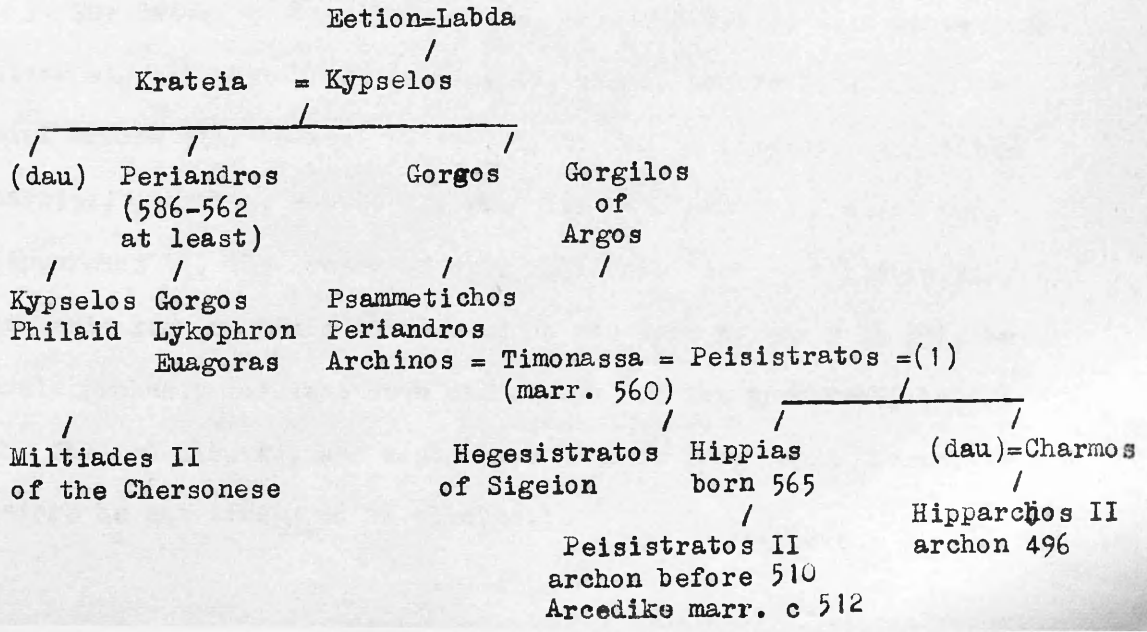
c. the event of the year 565

The foregoing hypothesis accounts for all the figures of the Aristotelian Peisistratos, and also for his report of variants in the relative dating of the marriage of Peisistratos and Timonassa, some placing it at the first exile, and some at the accession. In the 33-year scheme, the accession is dated to 560; in the 38-year scheme, the first exile is in the 6th year of a reign beginning in 565, i.e. also in 560. That is to

say, although Aristotle's sources disagreed about the political dates of Peisistratos' life, they agreed on a family event. This suggests that the ultimate basis of the dating schemes was information from some member of the tyrant's family (such as Hipparchos II, the archon of 496).

The date 565 resembles that of 560 in that it is used in one way by Aristotle's sources for the 38-year scheme, and apparently in another way by Herodotus, to date the beginning of the second exile. This suggests that we have again a date of non-political origin, relating to some important family affair; and the event which obtrudes itself is the birth of Hippias. This would be particularly appropriate, for it would mean that the beginning of Peisistratos' career has been identified with the beginning of his "generation", the birth of his eldest son. The date is also historically feasible: if Hippias was born in 565, he would be 75 when he brought the Persians to Marathon - an old man, but not too old to hope for a few more years.

3. The genealogical evidence. This may be given diagrammatic form:



Psammetichos, the son of Gorgos and brother of Archinos, was the successor of Periandros at Corinth: his name seems to commemorate one of the two Psammetichoi who ruled Egypt from 663-10 and 593-89. The second Psammetichos is said by Herodotus (2.160) to have been on the throne when an Eleian embassy arrived in Egypt. The Eleans were friendly to Kypselos, but on his death quarrelled with Corinth; Herodotus gives no political context for the Egyptian visit. The archaeological evidence however suggests that from about 610, but not before, Corinth began to open her western markets to competition from other Greek industries, and to seek compensating openings in other markets. Egypt was one of the most important of such other markets, and it might be suggested that the Eleian embassy was associated with Corinthian penetration into this area. The name of Psammetichos perhaps commemorates this development, and the name of the second Psammetichos of Egypt. His birth, and those of his brothers, in the years around 590 will allow time for Archinos to have married and died before 560. These dates well fit his place in the genealogy between Periandros and Peisistratos.

The dates of the grandchildren of Peisistratos also agree with these suggestions: Peisistratos II, archon before 510, would be born before 540: he will be the eldest son of Hippias. Archedike married, probably, about 512: she will have been born about 530. Hipparchos II, the archon of 496, will have been born before 526, probably several years before: if he was born as early as 539, he would probably not have been old enough for the archonship before the fall of Hippias, and would have to wait some years thereafter before he was likely to be elected.

The children of Peisistratos and his first wife were thus, apparently, marrying Athenians about 545-30, and since their spouses were Athenian, these marriages took place while the family was in Athens. If Hippias was born in 565, he would be twenty in 545, and his marriage should belong to the second tyranny of Peisistratos, when Peisistratos married Megakles' daughter. This dynastic marriage of the father might explain the early marriage of the son. The archon Hipparchos II's mother could thus be Peisistratos' eldest child, and married about the same time.

These genealogical inferences are in accordance with the traditions in Herodotus of the importance of Hippias to his father by the time of the second tyranny and second exile. Hippias and his brother were young men by the time of the second tyranny (1.61), and at the beginning of the second exile, Hippias has the decisive voice in the family deliberations.

The dates suggested may now be tabulated:

565 Hippias born
560 Peisistratos marries Timonassa
545-40 Hippias marries Myrrhine: Peisistratos II born
Peisistratos marries Megakles' daughter
Peisistratos' daughter marries Charmos

b. The marriages of Agariste and her daughter

The Herodotean account of the marriage of Peisistratos and Megakles' daughter shows that his source assumed that the girl's mother was still alive, and still married to Megakles, that is, that the mother was Agariste. Consequently the date of the daughter's marriage gives a terminus ante quem for the mother's, which took place a year or more after Kleisthenes' victory at Olympia. As the girl would probably be not less than fourteen

at the time of her marriage, and this would not be later than 545-0, Agariste would be married before 559-4.

A similar terminus ante is obtained by a different argument. Kleisthenes, in the course of his quarrel with Argos, changed the names of the Sikyonian tribes, and these names continued in use for 60 years after his death (5.68). A date for the end of these 60 years may be found as follows: Kleomenes used Sikyonian boats during the Sepeia campaign: after this, and before some year before about 485, Argos fined Sikyon for permitting the use of these boats, and Sikyon paid the fine. Aigina, fined at the same time, refused to pay. The fine was probably imposed before the medism of Aigina in 491, and if the Sepeia campaign was in 494, the probable date of the fine is 492, when Sparta was already weakened by stasis. The payment of the fine may be associated with the resumption of the old tribal names. The first of the sixty years, on this argument is 552, and this will be the year after the death of Kleisthenes: his daughter's marriage will then be some years before, for one of her suitors was the king (?) of Argos, and his refusal by Kleisthenes may have formed part of the quarrel between Argos and Sikyon.

The latest possible dates for the Olympiad of Kleisthenes are therefore the years 564 and 560 B.C. Herodotus states that the marriage took place after the visit of Alkmeon to Sardis (6.126), which he would date after 567, but which should be dated rather to about 561 at the earliest. If this is a valid terminus post, then the Olympiad of Kleisthenes is that of 560 B.C. The marriage of Agariste will then be dated to ~~circ~~ 559, and the marriage of

her daughter will not be earlier than 544.

The story of the marriage implies that Megakles and Peisistratos both regarded it as a dynastic alliance, and Megakles hoped for royal grandchildren. A dynastic marriage is expected to produce a child within two, or at most three, years, and this marriage can hardly have lasted longer. This has some bearing on the length of Peisistratos' second tyranny, for if Peisistratos married the girl on his arrival in Athens, his tyranny would not last more than three years, and if the tyranny lasted longer, it is to be inferred that a betrothal preceded the marriage because the girl was not yet old enough.

4. Herodotean and vulgate datings

The application of the Herodotean datings to these events reveals the source of some familiar elements in the vulgate chronography of the early sixth century. Peisistratos' second tyranny ends in 565, consequently his marriage with Megakles' daughter takes place before 565, and Agariste's marriage before 581; the Olympiad of Kleisthenes will be that of 584, during the time when, according to the later authors, the reorganisation of the Pythian games was taking place, of which the era year was 582, i.e. 26 years before 556, the date given (following Herodotus) to the embassy of Kroisos to Delphi, by both the Marmor Parium and Eusebius.

5. The common source of Herodotus and Aristotle

The proposition is therefore that Herodotus and Aristotle drew on a common source for their datings, from which both retain

the duration of the second exile, and the beginning of numbered years in 565. Herodotus misused the figure of 36 regnal years; and his date for the fall of Sardis, and belief that Peisistratos was ruling at that time, lengthened (by inference) the last tyranny. On the other hand, Aristotle's immediate source postdated the span of 51 years and then deduced a figure of 33 years for Peisistratos.

On this argument, the dates of the common source were:

565-60: first tyranny of Peisistratos
560-49: first exile
549-43: second tyranny
543-33: second exile
533-28: third tyranny
527-15: tyranny of the Peisistratidai
514-10: first period of stasis.

The question is whether this dating is naturalistic or formal. It contains two difficulties (1) the first accession of Peisistratos is dated to the year which probably was the date of the birth of Hippias, which is a suspiciously apt date for the beginning of Peisistratos' political career, or "generation"; and consequently the marriage with Timonassa falls at the beginning of the first exile, which seems unlikely; and (2) the length of the second tyranny implies a long betrothal to Megakles' daughter, a situation likely to engender friction long before the marriage took place. We might expect rather that Peisistratos married Timonassa before, or at the beginning of, his first tyranny. Moreover, if Megakles' daughter was not of marriageable age before 544, the second tyranny would hardly be expected to begin before 545. This date, when the difficulties of an Athenian dependency in Asia might be expected to be acute, would also explain why Peisistratos was willing to

return to Athens merely as the prospective son-in-law of Megakles; the year 543 for his expulsion would be maintained, and Hippias' eldest son would be born in 544/3.

This argument suggests the following approximate time-scale:

565 Birth of Hippias
562? Arbitration of Sigeion. Accession of Psammetichos in Corinth
561? Alkmeon in Sardis
560 Marriage of Timonassa. Olympiad of Kleisthenes
559 Wooing of Agariste. Last year of Psammetichos in Corinth
558 Marriage of Agariste: suit of Leokedes of Argos refused: quarrel of Sikyon and Argos. Suit of Hippokleides, Philaid and Kypselid, refused, perhaps because of the fall of the tyranny in Corinth. Birth of Agariste's daughter
556? Birth of Agariste's son Kleisthenes
552? Death of Kleisthenes of Sikyon
546 Thyrea campaign, followed by ? deposition of Meltas of Argos
Fall of Kroisos.
545 Second tyranny of Peisistratos.
544. Marriages of (1) Peisistratos and Agariste's daughter; (2) Hippias and Myrrhine, (3) Charmos and Peisistratos' daughter.
543. Birth of Peisistratos II. Expulsion of Peisistratos
535. Return of Peisistratos.

The question then arises of the origin of the figures in the common source. We have suggested that its basis was Peisistratean family tradition, remembering the years of the birth of Hippias and the marriage of Timonassa. The dating seems to be reasonably accurate from 543 onwards; but the equation of the first tyrannical year of Peisistratos with the probable birth year of Hippias appears schematic: it makes Peisistratos' political life occupy the (naturalistic) generation before his sons' accession, and creates a period of 22 years, 565-43, in which the political biography of Peisistratos had to be disposed. The solution adopted for this problem is arithmetically so crude, and historically so shiftless, as to mark its author as belonging to the pre-chronographic period. Of the 22 years, 11 are given to the first exile, and 5 plus 6 = 11 to the two tyrannies.

The fascinating problem of the identity of the source remains. The family traditions of births and marriages suggest a basis in oral tradition, not in written or state archives. The first written form of these dates may have served some author as the introduction to the original of the "annotated annals", which go up to 500 B.C. and possibly later, but not so late as the third Aiginetan war, where there is less evidence of an annalistic base in the Herodotean narrative. The period covered by this source would then be 565-490 or so, and the author perhaps worked soon after Marathon, explaining and glorifying that victory. It would appear that the original data of this source did not include the years of Peisistratos' first tyranny and first exile, but were restricted to the following events:

565 birth of Hippias
560 marriage of Timonassa
544 three marriages of Peisistratos and his children
543 beginning of the second exile
533 the third tyranny
527 accession of Hippias
514 stasis: beginning of the "annotated annals".

γ. Dates given to Solon. 1. Year dates

The Herodotean dating of Solon makes him contemporary with the early years of Peisistratos: it is delimited thus:

1.29ff: Solon and Kroisos: between 567 and 561 (=c561-555), before the death of Atys.

2.177: Solon took a law from Amasis of Egypt, who reigned 574 onwards if we reckon Kambyses from 529, as Herodotus seems to do.

5.113: Solon praised Philokypros of Cyprus, whose son died about 496. Two generations before this for the accession of Philokypros can hardly have been reckoned earlier than 496 plus 39 x 2 = 574

(4.76f: Anacharsis the Skyth belongs to the generation before the contemporaries of Dareios, whose generation (not reign) begins in 529: the preceding generation would begin not earlier than 529 plus 39 = 568. In later sources, Anacharsis is a younger contemporary of Solon.)

Thus it could be calculated that the Herodotean date for Solon was after the accession of Amasis and before the death of Atys, i.e. in the years 573-62. These limits of dating compare with our other sources thus:

Demosthenes περὶ παραπρεσβ. 251 (speaking in 343 B.C.) says that it is 240 years from Solon to the present time; i.e. Solon is dated to approximately 583 B.C.

Aristotle Ath.Pol. 14.1: Peisistratos acceded in the 32nd year of the nomothesia; i.e. 560 is the 32nd year, and 591 the first, and the year of Solon.

Sosikrates: Solon's archonship in 594

Suidas: Solon in Ol.47 (592-89) or in Ol.56(556-3). The first of these is Aristotle's date; the second may come from Herakleides Pontikos (a pupil of Aristotle) who believed that Solon lived long into the time of Peisistratos (Plt. Solon.32.2)

(a) the problem of variations in the archon list

Since Solon was, apparently, archon in the year of the nomothesia, any variations in his date raise the question of a variable archon list. But the terms in which the question is put require careful consideration. The archon list in its earlier part served two purposes; it was a list of named years, and it was also, in part, a list of the chief men of Athens. Ouroown method of dating also serves two purposes: it is a list of numbered years and a statement of the yearssof Our Lord, of a particular stage in history. We use our list far more frequently for purely secular purposes than to imply a particular historiographic view; consequently, although some maintain thatthe birth of Christ occurred in 4 B.C., the list of years is not variable. The question of the variability of the archon list is therefore really two questions: first whether the official archon list, the list of named years,was variable; and second, whether historiographic views about the persons named on the list varied from time

to time among the learned. There may well have been different dates for Solon from time to time, without these views having any influence on the official archon list: if there were, it would be sufficient for all historical narrative writers (as distinct from the chronographers themselves) to give notices of numbers of years along with the archon name, to indicate the authority they used. So Aristotle gives the number of years from Solon to Komeas, but no number for Aristaichmos (the archon of Drakon's year: Ath. Pol. 4.1): and perhaps we should conclude that, for Aristotle, Aristaichmos' year was unvaried, while Solon's was different in different sources.

There is now epigraphic evidence for the publication of an official archon list (going back at least to Peisistratean times) in the period 430-20 B.C. It has often been argued, before and since this evidence appeared, that the official archon-list began to be kept when the archonship became annual, and that it was always available and invariable. But the question of what an archon-list would be needed for in these early times has to be fully discussed before such an argument can be convincing; dates in the historical period are used for legislation, for history-writing, and presumably for private purposes such as business contracts, mortgages, and the like. History-writing does not begin before the fifth century; and we may suppose that legislation until Kleisthenes' time was either simple, comprehensive and theoretically eternal, or concerned with matters like embassies, war and peace, which do not absolutely require dating for their efficient conduct. The accounts we haveof the arbitrations of Sigeion and Salamis do not suggest the use of

detailed memoranda of recent historical events, but rather the contrary: appeal to ancient title and immemorial custom, with a tacit recognition that in recent times the issue had been confused by actions best forgotten. As for business documents, the courts of the fourth century seem to have been crowded with cases which imply that the science of accurate legal expression was in its infancy.

These considerations must be weighed along with the evidence that the year 683, when the archons begin, was itself chronographically computed in the second half of the fifth century, and that a number of other Attic dates have the same origin, including some of the archon names. The evidence of the Peisistratean dates, and of the "annotated annals", also suggests that, for the years before 514, true dating depended on memory: so that back to 565 some few, personally important, events might be remembered to the exact year in oral tradition, but before that the traditions were undated except by generations. The evidence is probably sufficient to warrant, in the present state of our information, the working hypothesis that the first official archon list was published in the years around 425 B.C.

It seems probable therefore that Herodotus collected his material for Solon and Peisistratos before the publication of the official list, at a time when the historiography and chronography of Athens was just beginning, and when the generation of the Marathonomachoi (who will have included those who knew Hippias' age and other traditions of the tyranny) was dying out. The Herodotean date for Solon therefore is not evidence for the archon

list; but all our later sources may be supposed either to give Solon's official date (and so differ only by accident of error) or a deliberate alternative.

b. Texts requiring no alteration.

The chief text is that of Laertius (1.62), which gives Sosikrates' date for Solon, placing his akme in 01.46, and his nomothesia in 01.46.3 = 594 B.C. The same Olympiad is mentioned by Clement and Cyril, and probably once by Tatian, although his text now gives 01.4[0]. Sosikrates' date is thus more than 20 years earlier than the Herodotean upper limit; and Demosthenes' date of c583 strikes a nice mean between the two. These texts therefore need no alteration, and though Sosikrates is too late an author for us to assume without more ado that he represents the fifth-century list, still the Demosthenic figure suggests the existence of an early date for Solon in the mid-fourth century, within 80 years of the publication of the official archon list. We have to bear in mind that these 80 years covered a by no means negligible amount of Atthidography, all of which is lost.

The text of Suidas also needs no alteration: his earlier date is evidence for the state of his (of his source's) text of Aristotle, which we know already from the papyri; his later date corresponds to the historiographic view of Herakleides Pontikos, which it probably represents; and since this correspondence exists, there is no need to change the text. It is however not necessary to suppose that 01 56 was ever the date of Solon's archonship: it will have belonged to

some later activity.

The remaining text is that of Aristotle, which is usually amended to agree with Sosikrates. The conditions of emendation may be defined by comparing Aristotle's account of the period from Solon to Damasias II with accounts of the Sacred War and the foundation of the Pythia, which overlap the period covered by the Aristotelian narrative.

c. Damasias and the Sacred War.

The relative dating of Solon and Damasias is thus set forth by Aristotle Ath.Pol.13

Year.	Event
1.	Solon's *arche*
2.	Quiet
3.	Quiet
4.	Quiet
5.(1)	Anarchia: in the 5th year after Solon's *arche*
6.(2)	Quiet
7.(3)	Quiet
8.(4)	Quiet
9.(5) (1)	Anarchia: in the 5th year again
10. (2)	Quiet
11 (3)	Quiet
12. (4)	Quiet
13. (5)	Damasias:after the same interval
14.	Damasias again
15.	Damasias for two months, then the ten archons.

Damasias is known from the *Marmor Parium* and the scholiasts to Pindar as archon at Athens when the first regular pentaeteric Pythiad was celebrated. From the table above it is obvious that if the first year of Damasias is a Pythiad year, then the year of Solon's *arche* is a "negative" Pythiad year, i.e. 594 or 590 B.C., and conversely, if Solon's *arche* is dated to 591, the Pythiad year is Damasias' second year.

It has been argued thatthe official archon list would have

Damasias' name for his first year, and an anarchia for his second year, because that year was illegal: consequently Aristotle was not dependent on the official archon list for his information about Damasias' 2 years and 2 months in this period. Similarly it has been argued that the Marmor's Pythiad of 582 B.C., dated to the archonship of Damasias, must mean Damasias' first year, for the same reasons. Following out this argument therefore, we find that the official archon list placed Damasias' first year in 582 B.C. (and therefore, if it possessed Aristotle's relative dating of Damasias and Solon, the official list, dated Solon to 594 B.C.); while Aristotle's source was not directly dependent on the official archon list, so that it is not necessary to conclude that Damasias' first year in Aristotle is also 582 B.C.: in fact, if Solon is dated to 591, Damasias' second year is 578: and there is no necessity for emendation. But it is obvious that the argument and conclusions are only permissible if reason can be shown to believe that Damasias and the Pythiad were traditionally associated independently of exact year dates.

There are two sources for the dating of the Sacred War and first regular Pythiad, the Marmor Parium and Pindar's scholiasts; Kallisthenes adds that the war's 10th year was that of the fall of Kirrha. The Marmor places the fall of Kirrha in the archonship of Simon, 591 B.C., and the Pythiad of Damasias in 582; the scholiasts agree with the Parian on the synchronisms of events and archons, but place a six-years' interval between them. We seem therefore to have a number of dating derivatives

from a common narrative, undated, source; and the relations of these derivatives to one another may be shown:

	Aristot.	MP.	Schol	
1. Solon's archonship	591	(594)	(591)	
2				
3.				
4. 10th year of war: Simon	(588)	591	(588)	1.
5. Anarchia				2.
6.				3.
7.				4.
8.				5.
9. Anarchia				6.
10.	(582)		582	
11.				
12.				
13. Damasias		582		
14. Damasias	578			
15. Damasias.				

The scholiasts' account seems to combine the other two versions and therefore omit several years: one of the scholiasts also reckons the six-years' interval inclusively, and so adds to the confusion. Pausanias' dating of the first Pythiad to 586 B.C. seems to arise from a computation which placed the first of the six years (Simon's year) in 591 B.C.: that is, the scholiasts and Pausanias join with Suidas in showing that the Aristotelian date for Solon enjoyed wide favour in late antiquity, even though it would appear (from the evidence of the Marmor) that it was not the date of the official archon list. This demonstration is also important as showing that the date of 594 was probably Solon's year by the time of the Marmor at least, if not in the official list, so that Sosikrates now has some inferential support for his date. Finally, it would appear that Damasias was always archon of the Pythiad, whether the first celebtration of that festival was placed in 578, 582, or 586:

that is, we have here a historical datum of far greater authority than any of the year dates.

The chronography of the two dates for Solon may be easily found, and both mean the same generation-count: 591 is 39 x before Peisistratos' career begins in 565; 594 is 39 x 2 before the last appearance of Hippias (two natural generations later than Peisistratos' career begins) at Marathon in 490. Aristotle's source is therefore someone working (after the third of a generation was invented c430-20) on the Peisistratean tradition represented by the 38-year scheme, possibly in the form that Peisistratos' generation, rather than his reign, began in 565 B.C. The chronographers thus agree in asserting that Solon's nomothesia was two thirds of a generation before Peisistratos' beginnings: and this indication of relative date may be trusted even though the definition of what constituted Peisistratos' beginnings may be criticised.

2. Generation Dates

The generation-dating of Solon begins with Herodotus, who made him contemporary with Alkmeon, and through Alkmeon as well as in his own person, with Kroisos. The dates for Solon in 591 or 594 sever his synchronism with Kroisos, but maintain that with Alkmeon because both men appear in the narrative of the Sacred War.

Plato is also a witness to the generation-date of Solon, for his Kritias (Tim.20f) says that when he was 10 years of age his grandfather was 90, and told him that his father (Kritias' greatgrandfather Dropides) was an intimate friend of Solon's. This Kritias first appears in history in 410 B.C., so that

allowing a large margin of error in estimating his age at that date we may calculate as follows:

Kritias aged 30-60 in 410 B.C.
aged 10
his g.father aged 90 in 460-30 B.C.

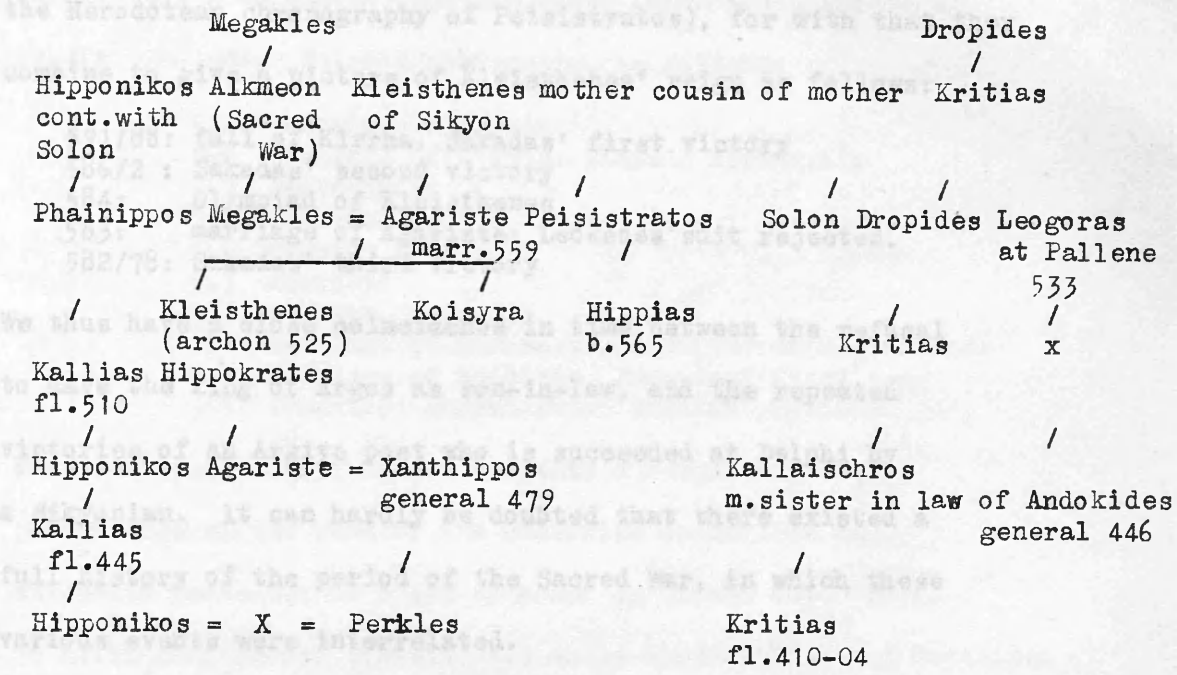
his g.father born
Dropides not old in 550-20 B.C.

The archontic tradition of this family is also of considerable interest. Dropides himself was archon "after Solon", which should mean in 593 B.C.: but the fifth-century Eupolis seems to be responsible for naming one Phormion as the archon "after Solon". It may be therefore that Dropides the archon after Solon is so designated to distinguish him from his grandfather, the archon of 645 B.C.; and thisis the more probable in that his father Kritias appears as archon in 600, which would only allow 7 years between father and son - a very rapid succession in a family of long generations. Then we have:

Dropides archon 645 one generation in 45 years = 27
/
Kritias archon 600
/
Dropides archon after Solon
/ 5 generations in 196
Kritias lived 90 years years = 39 x 5 plus 1.
/ (=45 x 2)
Kallaischros
/
Kritias fl.410-04

This seems to be a good instance of the way in which generation-lengths were manipulated by the chronographers in the construction of the archon list. Moreover, if the official archon list put Solon in 594, his date in 591 may be related especially to the traditions of this family, for 591 is 27 x 2 years later than 645.

The evidence from Athanian genealogies for the date of Solon may be assembled as follows:



We thus see that Solon belongs to the generation of (1) the grandfather of a man who was alive in 510 B.C.; (2) a woman who probably married in 559 B.C.; (3) the father of a man born in 565 B.C.; (4) a man still of military age in 533 B.C. A date not far from 570 is thus indicated for the early years of Solon's career; while the years about 550 are indicated for the later part by the genealogy of Kritias.

3. Non-Athenian evidence

Plutarch has preserved the names of the victors at the first nine musical contests of the Pythia: Sakadas of Argos won the first three, and Pythokritos of Sikyon the next six. Sakadas' first victory was that celebrated on the fall of Kirrha in 591 or 588; his next two therefore were in 586 or 582, and 582 or 578. Pythokritos' victories run from 578 or 574 up to nad

including 558 or 554. These dates, in general, seem to belong with the early date for Agariste's marriage, (which is based on the Herodotean chronography of Peisistratos), for with that they combine to give a picture of Kleisthenes' reign as follows:

591/88: fall of Kirrha, Sakadas' first victory
586/2 : Sakadas' second victory
584: Olympiad of Kleisthenes
583: marriage of Agariste: Leokedes'suit rejected.
582/78: Sakadas' third victory

We thus have a close coincidence in time between the refusal to have the king of Argos as son-in-law, and the repeated victories of an Argive poet who is succeeded at Delphi by a Sikyonian. It can hardly be doubted that there existed a full history of the period of the Sacred War, in which these various events were interrelated.

We have seen however that a more probable date for Agariste's marriage was 559 B.C., which disrupts the whole order of events. But if the dating of the first Pythiads is too early, this may be because the victories of Sakadas and Pythokritos have been multiplied: that is, instead of the traditional dates we must work with latest possible dates, of 558 for Sakadas and 554 for Pythokritos. These are notable in that they provide the same dating relative to Agariste's marriage in 559 as the earlier dates to the marriage in 583:

560: Olympiad of Kleisthenes
559: Marriage of Agariste
558: (Last?) victory of Sakadas at Delphi
554: Victory of Pythokritos of Sikyon at Delphi
553: Death of Kleisthenes (see above, p.216)

We may perhaps infer, that in the development of the traditional narrative, Sakadas came to have three victories at the Pythia

because of the fluctuation of date: that is, Sakadas' (originally one) Pythia is the same event as Damasias' Pythia. If so, we immediately have latest possible dates for a whole series of events, including Solon's archonship, as follows:

571 Solon's archonship
568 The fall of Kirrha: Simon's archonship
567 Anarchia
566 Panathenaia??
565 Hippias born
563 Anarchia
561 Alkmeon in Sardis
560 Marriage of Timonassa. Olympiad of Kleisthenes
559 Marriage of Agariste: Damasias' first year
558 Damasias' second year: Sakadas' Pythiad

This juxtaposition of events suggests a reason for the persistence of the name of the otherwise colourless and enigmatic Damasias: he rises to power in Athens while Solon is still away on his travels, and while Hippokleides and Megakles are busy at their wooing. Moreover, Periandros probably died about 560; and the statement that Kleisthenes at first favoured Hippokleides for his Kypselid connections, then turned to Megakles, suggests (Hippokleides' irresponsibility apart) that during the year of wooing Periandros' successor Psammetichos may have proved himself a weakling. Damasias, in that case, will not only represent a tendency liberated by the weakness of the party of Solon, Megakles, and Hippokleides, but also belong to a wider context: the realignment of forces in Athens due to the actual (as distinct from the formal) disappearance of the Corinthian tyranny.

It is of course a crucial problem why so many of the vulgate dates for theseeevents continued to be based on the Herodotean dating of the Peisistratean tyranny long after the

Aristotelian 33-year scheme was adopted, and in face of anx even shorter dating (represented by Isokrates and Aristophanes the grammarian) of a total of 40 or 41 years for the tyranny, which would place Peisistratos' accession as latex as 551/0.[15]

15. Aristophanes' date is reported by the scholiast to Aristoph. Wasps 502, with the comment that Eratosthenes' date of 50 years is grossly inaccurate. This looks like the echo of an ancient polemic.

The reason is plain if we suppose (as is argued above) that Pheidon of Argos has been expelled from his historical place in the first generation of the sixth century, to leave a yawning gap which had to be filled by extending the next generation. We have already seen reason to believe that the intrigues of Sikyon, Corinth, and Argos in the time of Isodemos the brother and predecessor of Kleisthenes, were due to Pheidon's activity, and we can now approximately date them. Nicolas of Damascus states that the three brothers Myron II, Isodemos and Kleisthenes reigned for 7, 1, and 31 years respectively. These figures cannot, unfortunately, be precisely trusted, because together they make up the conventional 39 years of a generation, but they may give the correct proportions of time to be allotted to each brother. If we date Kleisthenes' death to 553, we then have the relative order of events:

591-585 (Myron II in Sikyon)
(x plus) 586: Acession of Periandros in Corinth
584 (Isodemos of Sikyon intrigues with the Kypselidai and is expelled: Periandros and Milesian forces attack Sikyon, but do not, apparently, succeed in reinstating Isodemos, perhaps because Argos under Pheidon supports Kleisthenes)
577-68 The Sacred War against Kirrha: Thessaly, Athens, Sikyon and perhaps Argos. The place of Corinth in this struggle is by no means clear, but the attack on Kirrha

can hardly not have had Periandros' approval in the circumstances. Perhaps the decision to send Lykophron to Korkyra was taken about this time, and Corinth was busy with her colonies.

560 Olympiad of Kleisthenes. Marriage of Timonassa, in whose person we have evidence fro friendship between Corinth and Argos c565, perhaps an inheritance from the Sacred War.

559. Rejection of the suit of Keokedes of Argos, and of the Kypselid Hippokleides, suggests that Kleisthenes was now preparing to pursue a policy independent of both Argos and Corinth

558. Victory of Sakadas of Argos (author of an Ilioupersis) in the Delphi which Kleisthenes freed, perhaps taken as evidence that Delphi (=Corint?) disapproved of Kleisthenes' policy.

557? Kleisthenes finally establishes his policy of Sikyonian independence. This amounts to secession from the Argive League. The renaming of the Dorian tribes, and the keeping of these names for sixty years after Kleisthenes' death, seem to be ~~merely~~ aspects of a wider nationalism than that of the non-Dorians alone; i.e. the Dorians of Sikyon by this time felt themselves Sikyonians rather than Dorians.

553. Death of Kleisthenes
546. Argos loses Thyreatis
494. Kleomenes destroys the Argive League
492. Sikyon rejoins the Argive League, pays the fine and reverts to the Dorian tribe names.

In the traditions as we have them, Pheidon's name does not appear in the events of c584, and the role of Argos in the Sacred War is minimal; no explanation is given of the marraige of a prince of Corinth to Timonassa of Argos. If we take the early datings of the Corinthian tyranny, and date the Sikyonian events by the early date of Sepeia and its consequences, we obtain something likethe historiographic view which may be supposed to have lain beneath the vulgate dates:

625. Periandros accedes in Corinth. He is married to a princess of Epidauros
615-09. Myron II in Sikyon
608. Isodemos' Corinthian intrigues. An Epidaurian victor at Olympia
607 Accession of Kleisthenes
600. Epidaurian victor at Olympia
597. First year of the Sacred War
588. Tenth year of the Sacred War: first victory of Sakadas
585. Death of Periandros
584. Accession of Psammetichos. Olympiad of Kleisthenes
583. Marriage of Agariste
582. Last year of Psammetichos. Second victory of Sakadas
577. Death of Kleisthenes

The relations of Agariste's marriage to the decline of Corinth are much the same in this version; but in the early years of the period the place of Pheidon's Argos is taken by her subject ally Epidauros, especially in the Olympic victor list. This may mean that the retrojection of Pheidon to the eighth or ninth century had already taken place by the time of Hippias of Elis, which is not improbable, for the early Lykourgos was already known to Herodotus.

5. The undated narratives: a. the condemnation of Alkmeon

Aristotle's narrative places the condemnation of Alkmeon before the nomothesia, and from his date for Solon we should suppose that the Sacred War, in which Alkmeon commanded, began in 597, six years before the nomothesia. Thus Aristotle's dates seem to be consistent with his narrative, and imply:

597. Sacred War begins: Alkmeon general 16 = 577
596/2 condemnation of Alkmeon: Epimenides = 576/2
591. Nomothesia = 571

Solon is recorded as an instigator of the Sacred War, whence we should conclude that in 597 = 577 he was working with Alkmeon, but that within five years had changed his policy, so that the condemnation of Alkmeon had become a necessary prerequisite of the nomothesia. The sentence recorded at the end of the trial

15. The suggestion that Epimenides should be dated at the end of the century in the time of Kleisthenes seems to be unnecessary. The importance of Crete in the first half of the sixth century is also shown by the mythology of "Lykourgos" and Crete. Similarly, the Athenian court of 300 which tried Alkmeon, if composed of 30 men from each phratry except those of Alkmeon and his accuser, looks like a genuinely archaic institution of pre-Solonian times.

is very interesting: the defendants already dead were thrown out of their tombs, and the genos was sentenced to exile for ever. The language presumably contains the sentence according to traditional law, in which genos means clan; but there is no mention of confiscation of property, and Megakles II soon became important at Athens. Probably therefore the sentence was interpreted so that genos meant son (as already in Homer), and Alkmeon is only mentioned again at Sardis. The perpetual exile of Alkmeon would explain why his son Megakles is an important politician in Athens beforehis father's death, and of course the narrow interpretation of the tradition l term genos would explain later attempts to

dispossess the family of its power and influence.

b. The Megarian War

From the tangled tale of Athens-Megarian relations at this time, it emerges that, apparently, Salamis was taken no fewer than three times by the Athenians, and Nisaia at least once; both, according to Plutarch, were lost during the trial of Alkmeon. It is before this loss that Plutarch places the Spartan arbitration, i.e. before (at latest) 572 B.C. Thus Plutarch's narrative would imply:

1. Salamis Athenian
2. Salamis Megarian: Solon's "Salamis"
3. Salamis taken by Solon and Peisistratos
4. Spartan arbitration
5. Salamis and Nisaia lost to the Megarians during Alkmeon's trial
6. (Salamis retaken)

Plutarch preserves the alleged argument of Solon addressed to the Spartan arbitrators, which gives the mythic and also the Homeric title of Athens to the island. Solon himself was also said to have been a Salaminios, and this may be accepted and interpreted as meaning that he was a member of the genos of the Salaminioi, the brother genos of the Philaidai, who were descendants of Aias of Salamis. (As Solon is also called a descendant of Kodros, we may infer that his phratry was the Medontidai, and consequently that the Salaminioi belonged to the Medontid phratry. Solon then belonged to the same phratry as Alkmeon, the descendant of the Medontids Megakles and Alkmeon.)

These arguments attributed to Solon imply that Salamis had not always been Athenian: it is however not necessary to suppose in consequence that it had been Megarian: it is more likely that it was Salaminian, and closely associated with both Athens and

Megara. In that case, as the communities near it became conscious of territorial statehood, Salamis would fall to one or the other, and the narrative suggests that Megara had the initiative, during the post-Kylonian stasis in Athens. The story given by Plutarch aboutthe recapture of the island by Solon and Peisistratos, and its ritual commemoration, seem to belong properly to the final acquisition of the island by Athens, so that the order of events should probably be:

1. Salamis Salaminian
2. Salamis occupied by the Megarians c 570
   Solon's "Salamis"
3. Salamis and Nisaia taken by Solon and Peisistratos
4. Spartan arbitration

If Salamis was lost about a year before the Nomothesia, it is difficult to imagine it was recaptured during that eventful year; and Solon was not in Athens again until, at least the year of the fall of Damasias. His "Salamis" may therefore belong to one of his first public appearances on his return (554?)[16], and the recapture of Salamis and capture of Nisaia to 555/4. The Spartan arbitration will follow, perhaps in 554/3, which is a more likely date for the appearance of Spartan influence so far north, for Sparta had probably by this time possessed her Lykourgan constitution for some years, and already established her prestige at Olympia, while Corinth has just lost her tyranny, and may have been in an unstable condition. All this however can only be an approximation.

16. although the "feigned lunacy" story indicates a different context, and to this extent this suggestion is unsatisfactory.

c. The two factions before Solon, and three thereafter

Before the Nomothesia, two factions are said to have existed in Attika, and their first appearance[17] is in the year of Kylon's

revolt, at a time when Megakles I was archon, and probably old enough to be Kylon's father. In the next generation, the two

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17. A certain amount of Athenian history before this may be put together:

c697: institution of the decennial archonship: rise of the oikos of Aischylos?

c680: Pantaklos at Olympia. With this hint of western interests, cp. the story of Athenians at the Chalkidian colony of Naxos

c657: Archonship opened to Eupatrid clans in other phratries (and presumably held, in practice, by Eupatrid oikoi in these clans) c634. Athenians in the Megarian colony of Kalchedon? (+318)

c627: Annual (Eupatrid) archonship

c634: The Lesbian "thalassocracy" c624

Tyrtaios: the first hint of unwillingness to Corinth-Chalkis- c615-590: The Solonian Kouroi and the legend of Daidalos Sparta

c610-590: Attic pots in Corinthian markets in Italy

c600-590: The Pisatan Olympiads and the three Athenian victors

c590-80: Kylon and Megakles: the two factions

c590-575: Drakon.

The Mitylenian War

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factions are represented by Megakles' son Alkmeon, and his accuser Myron of Phlye, with Solon apparently beginning his political career in the faction of Alkmeon at the time of the early campaigns of the Sacred War, and after the condemnation of Alkmeon acting as the leader of his faction, and as a national leader. A new stage, and apparently a later period, is marked by the emergence of Peisistratos as the military leader of Athens in the Megarian War, as a member of Solon's faction; but he also parts company with his leader, who is now Megakles II. The rise of Damasias during the absence of Megakles and Hippokleides in Sikyon suggests that at this time he led the other faction; and still later Lykourgos Aristolaidou appears as the enemy of Megakles II. With all the reservations due to our general ignorance of the nature and organisation of these factions, we should have the following succession of leaders at this period:

(1)	(2)	(2b)
Kylon	Megakles I	
Myron of Phlye	Alkmeon	
		Solon
Damasias		
Lykourgos	Megakles II	Peisistratos
(The Plain)	(The Coast)	(The Hills)

It is obvious that by taking the leadership against Alkmeon at the time of his trial, Solon might well be regarded by the Alkmeonidai and their friends as a traitor to their interests, the more so as he became for a short time the head of the Attic state. His self-imposed ten-years' exile is very probably therefore a genuine tradition, and his reason - apart from questions of personal safety - will have been avoidance of provocation to civil war during the first years of the new order. The danger to both persons and polity was believed at this time to be real, as is shown by the usurpation of Damasias, and the bodyguard voted to Peisistratos before he became tyrant.

6. Year-dates for Drakon.

The whole problem of the Megarian War and the factions cannot be considered apart from the story of Kylon and Megakles and the earlier lawgiver Drakon. Kylon's Olympia victory is given the date 640, but his tyranny, which also occurred in an Olympic year, is not dated. Drakon has two dates: Ol.39 (624/1) in Eatian, Clement, Suidas, and 621 or 619 in Eusebius; while Aristotle places Kylon before Drakon in his narrative, and Diodoros is quoted for the date for Drakon 47 years before Solon (in 594), i.e. Ol. 34.4 = 641 B.C. Since the year 644 = 527 (beginning of Hippias) plus 39 x 3, and the year 622 = 514 (end of Hipparchos) plus 27 x 4, the two dates mean the same generation, the third

before Hippias, and the one before Solon. Furthermore, since 641 (Diodoros) is one year before Kylon's Olympiad, it seems likely that 621 was intended to represent the year before Kylon's seizure of the akropolis, which in that case falls halfway through the generation. This is the opposite of Aristotle's relative dating.

7. Relative datings of events in the generations of Drakon and Solon

Megakles I: Drakon's lawcode and Kylon's revolt halfway through the generation, but their order uncertain. Phrynon's death in the Mitylenian War at the end.
Alkmeon: Sacred War (577)
Trial of Alkmeon c. 572 ?
Nomothesia: after one-third of the generation (571)
Corinthian arbitration of Sigeion (562?)
Damasias (559/7)
Spartan arbitration of Salamis (553?)

This relative dating separates Drakon and Solon by five-sixths of a generation, or about 20 years, so that Solon being dated to 571, Drakon and Kylon belong about 595-85.

8. The historiography of the period

Our view of the purposes of, and the forces which formed, the internal factions and external policy of the Athenians in these two generations depends almost entirely on the assessment of the purposes and forces behind the Solonian nomothesia.

The nobles, merchants, and peasants of Solonian Attika are generally imagined in terms appropriate to Tudor England or late feudal Europe. The assumption that the comparison of the two societies is valid rests, presumably, on a national social experience which has not been philosophically analysed, for it contains the logical error of supposing that because there are nobles, merchants, and peasants in any community, these must of unquestioned

necessity be described in terms of the characteristics of the nobles, merchants and peasants of a mercantile capitalist society. This does not follow.

Further philosophical outrages are gratuitously imported into the problem by modern copies of the ancient discussion whether Solon was a democrat. In ancient times, the category of democracy was a generalisation from native and vicarious experience (the latter including the study of constitutions etc), and it was a proper question of methodology to enquire whether Solon's activities should be subsumed under that head or not. The modern Democracy on the other hand is usually the particular author's own national experience morally extended into a Utopia beyond the "physics" of history and geography, and the almost inevitable result is to place sixth-century Athens in that philosophical receptacle also, where it is well beyond the historian's reach.

The unitary social organism in Attika from Drakon's time to that of Isaios - and probably before, and possibly after - was the anchisteia. It is defined by Drakon as including relatives as far as the cousin's son. In the fourth century, the inheritance laws of the anchisteia are seen at work in the speeches of Isaios, whose most famous speech is probably that on the estate of Hagnias, whose kleros passed, in default of proven kin in his father's anchisteia, to his mother's cousin.

When this unitary organisation is borne in mind for Solon's Athens, it promotes certain observations on Solon's property classes

which are important. Since all legitimate sons had an equal right to inheritance, if a pentakosiomedimnos had three sons or more, they would all be thetes. Conversely, if a thes had the fortune to fall heir to a kinsman's estate, and add it to his own, he would in some cases become a hippeus, like Diphilos (Ath.Pol.7) The critique of the Solonian property classes must be based on these considerations, and the phantom "merchant turned nobleman" kept firmly in his place by the Woolsack, where he belongs.

The inalienability of land, that is, the kleros of the male descent line, is of course a necessary corollary of the anchisteia, for without this economic focus the anchisteia would soon break up into families with our type of organisation. If land had been alienable in Solonian Athens, the peasants could have sold, not pledged it; and if the peasants had been tenants, they could have been turned off, not enserfed. Consequently, the Hektemoroi should probably be interpreted as arising (as a legal or political class) from a permissive law allowing the produce of a kleros to be pledged up to five-sixths of the total, the final one-sixth being legally safeguarded to ensure continued inalienability. A loophole in this safeguard was probably that failure to honour the pledge involved atimia, and as an atimos the defaulter was liable to be seized (with his family), and sold into slavery: the kleros with its encumbrances would pass to his anchistous.

In this context, it is possible to suggest that the Seisachtheia was a repeal of this permissive law, and a retrospective declaration that all acts performed under it were null and void. The creditors consequently would lose all rights to the produce of the pledged land,

and would be compelled to buy back the slaves they had got for nothing in the first place. The measure would be a reversion to the status quo before the law of the Hektemoroi came into operation, except in one necessary respect: where the credits had already been turned into goods (whether for consumption or production), and the consumption or production had already taken place, it could not be undone: that is, the status quo would be legal and social, not economic.

This immediately raises the question of what the credits had, in general, been needed for and spent on. Modern commentators usually suggest famine, or its equivalent, overpopulation. But we hear of neither famine nor colonies in our sources; and this should be decisive evidence against the spending of the credits on consumers' goods. The alternative requirement for the credits is for investment, and the growth of the Athenian pottery industry from 610/00 B.C. onwards suggests that the object of investment was new agricultural specialisations, particularly olives. The founding of Greek cities in the north Euxine (from 610 B.C. onwards) where the olive does not grow, must have opened a large new market for oil: and in the years shortly before Solon (that is, in Drakon's generation) the Athenians are fighting the Mitylenians, who as "thalassocrats" would control the ways to this market. But the Athenians would not be the only community engaged in the increase of olive production, and men who had obtained credits with the prospect of large profits may have found the price obtainable had fallen considerably by the time their olives were bearing.

Under the Hektemorian arrangement, the bulk of the olive crop would pass to the creditors each year; and since the Alkmeonidai

later led the merchant party, and Solon apparently obtained the exile of Alkmeon before he put through the Seisachtheia, it seems probable that the merchants were generally the creditors, and used the oil for the Euxine trade. They probably formed a ring in buying from the peasants: Thales is recorded as demonstrating by example how easy such organisation was in the olive industry about this time. The position of the peasant would then be that he sold at fixed low prices to the ring anything that was not due to his creditor under the Hektemorian arrangement, so that all economic means of improving his position were lost to him, and the only political means were left. Fortunately for the peasants, the merchants needed an army, and this the peasants provided; if the peasantry disappeared as citizens, so would the army and Athenian access to the Euxine. Thus the Seisachtheia was, it would seem, both the salvation of the peasants and the refusal of the merchants to commit suicide; it is carried through not long after the death of the Athenian general Phrynon in the war with Mitylene, and soon after the Megarian capture of Salamis. Since Alkmeon was general shortly before his trial, there may have been mutinies in the armies leading to these defeats.

If we now consider the development of the factions in the light of these considerations, we see that Megakles I, Alkmeon, and Megakles II appear as the successive leaders of the group which after Solon was called the Coast, and seems to represent the merchant interest. This faction would then be responsible for the Hektemorian arrangement, and responsible also for its maintenance up to the limit of national security. Solon replaces

Alkmeon as its leader when that limit is passed, and his change of policy (570/69) should mark a change in the group as a whole. The opposition to the merchants seems to have coalesced from time to time around the leadership of Kylon, Myron, Damasias and Lykourgos Aristolaidou, the last after Solon's nomothesia leading the faction known as the Plain, and represented the peasants on the best Attic land. (No doubt at any particular time, the wealthiest peasants were its leaders; but the anchisteia system of inheritance meant that wealth didnot descend in concentrated form.) These would be the people who had the best physical opportunity for olive growing, and consequently those most affected by the Hektemorian system. This faction would also include people who had escaped Hektemory: some may have planted olives before the system was introduced, and others not have needed credits; but there were probably few anchisteiai even of these "nobles" where some members did not become Hektemoroi. The first appearance among these people of opposition to the merchants' policy is in the revolt of Kylon, which apparently is closely associated with Drakon's law code: this suggests that the Hektemorian arrangement took its final shape as a part of that code, and that Kylon's revolt was directed against such a development. The seriousness of the revolt is usually minimised; the savagery of the repression gives quite another estimate of its importance. The repressors were Megakles I as archon, and (according to Herodotus) the Prytaneis of the Naukrariai; and it is reasonable to suppose that, whoever appointed or elected these prytaneis, they would be men chosen with an eye to their fitness for the office, interested in ships and sea-going. Their presence in the story should not,

therefore, be taken as proof that the Attic peasants loved Megakles I or the things he stood for; though it is likely that few saw the dangers as clearly as Kylon, who had Megarian experience to draw on.

The chronographers' generation dates suggest that about twenty years passed between the Drakonian and Solonian laws. This would be about the time required for the turnover to olive production to be complete, and therewith the disillunsionment of the peasants wih the results of the Hektemorian system. This supports the chronographic suggestion, but not of course the year dates. The reduced dating in the previous section gives Drakon a year in the period 590-85, at the time when Attic pottery is making its first appearance throughout the Corinthain export area, that is, when Athenian trade is really beginning to be a serious economic proposition. Thisis theproper context for the supposed Hektemorian law.

Although the exile of Alkmeon must have disorganized the merchant fraternity at Athens, Solon apparently did no more than this to destroy the ring which may be supposed to have existed. The minority of Megakles II and the absence of Solon from Athens seems to have led to a suspension of the Megarian war, as well as the rise of the Plain to supreme power under Damasias. But before Damasias became archon, it seems that Peisistratos had married Timonassa, and secured the arbitration of Sigeion; on Solon's return, Megara was defeated, while Megakles II had brought back Agariste (and her dowry) and Alkmeon, probably still in exile, was enriching himself at Sardis. A new equilibrium had therefore been achieved by about 559 BC, and this formed the basis for the later struggles for power.

The dating of Drakon and the Hektemorian arrangement to about

595-85 makes the first important economic and state organisation in Attika contemporary with the Herodotean Pheidon. We have suggested in chapter III above, that Pheidon represents, far more than the Corinthian and Sikyonian tyrannies, the establishment ofmarket organisation of trade. On our present dating, the Hektemory law is contemporary both with the Pheidonian development and the exemplary demonstration by Thales of the use of generalising techniques of thought in commercial matters. The historical context seems to be appropriate.

8. Development of the chronography of the period.

The chronographic analysis of the dates for Solon suggests that the chronographers differed in method from Herodotus and his source, but had independent material only about Damasias and the circumstances of his usurpation. Consequently, Herodotus represents the oldest surviving use of a common stock of evidence, and as the nearest witness to the events is the best authority.

It is possible to make a tentative reconstruction of the development of Athenian chronography. The first layer is represented by the dates 565-14 for the tyranny. This stage is probably pre-chronographic, but already contains the definition of a man's generation as beginning with the birth of his eldest son. A development in this tradition, after the invention of the third of a generation, led to the chronography of Aristotle's source, with Solon in 591, Peisistratos' generation in 565, and his accession in 560.

The official archon list however retained the base-date of 514 for its overall structure, and allowed 39 x 4⅓

generations of annual archonship back to 683 B.C. To this list belongs the archonship of Hippokleides in 566 B.C., and that of Miltiades I in 659, though this latter may previously have been calculated for family purposes. Similarly, the placing of Dropides I in 645 and Kritias I in 600 may be associated with Solon in 591; in which case the official archon list would seem to be aware of, and therefore later than, the Aristotelian date of Solon. The elder Peisistratos in 669, 27 x 7 years before 480, dates the battle of Hysiai, and may have been calculated in relation to Peisistratos' marriage with Timonassa: the date for this, we have argued, was 560, so that Hysiai may be placed a year too early by Pausanias, i.e. possibly it should be placed 108 years after 01.1 rather than in the 108th Olympic year, and so in the same year as the Gymnopaidia. In that case, the official archon list assumed the accession of Peisistratos the tyrant in 560 (and therefore knew the Aristotelian scheme), and calculated the archonship of the elder Peisistratos accordingly. It is also possible that 594 was the date of Solon's archonship in the official list, 39 x 2⅔ generations before Marathon.

It is not until the time of Herakleides Pontikos and Aristophanes the grammarian that later dates in consonance with other genealogies than that of Peisistratos begin to appear, with Solon placed in 556-3 (in agreement with his friendship for Dropides), and Peisistratos' accession in 555/4 or 551/0, in opposition to Eratosthenes and the general chronographic tradition. These datings probably have no independent evidential value, for

they could be constructed out of materials which we also know: Isokrates' figure of 40 years for the tyranny may however suggest that Aristophanes had predecessors. Nevertheless, they are important as showing the kind of alternative dating which the ancients believed was possible, and so serve to indicate the limits within which modern historical work should move in default of contemporary sixth-century evidence.

The datings for Athenian and allied events suggested here are tabulated below. All dates given are subject to a margin of error of not less than 5 years either way, and those queried have a larger margin.

588 ?Pheidon in Elis (p.87) ??Kylon in Athens
587
586 Accession of Periandros. Elean quarrel with Argos and Corinth (p.87) Corinthian rapprochement with Miletos (p.311)
585
584 ?Corinth attacks Sikyon, which remains in the Argive League
583 Accession of Kleisthenes
582
581
580 ?Elean attack on Pisa (p.87)
579 ? Death of Phrynon in the Mitylenian War
578
577 Beginning of the Sacred War: Kleisthenes, Solon, Alkmeon
576
575 The Phokaian "thalassocracy"
574
573
572 Epimenides. Alkmeon exiled. Megara takes Salamis
571 Solon's nomothesia
570 (Renascence of sculpture in Attika: Richter, Kouroi)
569
568 Fall of Kirrha: Simon archon
567 Anarchia in Athens
566 Panathenaia??
565 Birth of Hippias
564 ?Last Pisatan Olympiad (p.87)
563 Anarchia in Athens. Miletos and Phokaia found Amisos (p.318)
562 The Korkyrean boys?
561 The arbitration of Sigeion. Alkmeon in Sardis
560 Marriage of Timonassa. Death of Periandros. Olympiad of Kleisthenes. ?Iphitos and Lykourgos.

559. Damasias. Marriage of Agariste: Leokedes of Argos rebuffed. Megara and Boiotia found Herakleia Pontike (p.318). Psammetichos in Corinth
558. Damasias: the Pythiad of Sakadas. ~~Six~~
557. Sikyon secedes from the Argive League. Damasias and the ten archons. Last year of Psammetichos of Corinth
556. Ephorate of Chilon. The Isthmia? Corinth and the Peloponnesian League?
555. Solon's "Salamis" and law on the Isthmia (Herakleides' date for Solon). Now or 554 is the first of Aristophanes' 41 years of the tyranny if he made it end in 514.
554. Capture of Salamis and Nisaia by Solon and Peisistratos. Panathenaia? Pythokritos of Sikyon at Delphi
553. Spartan arbitration of Salamis. Death of Kleisthenes of Sikyon
552. ? Psephisma of Aristion
551. Now or 550 the first of Aristophanes' 41 years of the tyranny if he made it end in 510.
550. ?Death of Solon (in the year after Peisistratos accedes). (Friendship of Solon and Dropides).
549
548 ?Peisistratos in Sigeion
547 Miltiades in the Chersonese
546 Fall of Sardis. Sparta takes Thyreatis
545 Peisistratos in Athens: the marriages
544 Birth of Peisistratos II
543 Expulsion of Peisistratos
542 - 534 The absence of events in Athenian history is probably due to the use of Peisistratean family records as the main source.
533 Battle of Pallene: Peisistratos' third tyranny.

F. The Chronographic Scheme in Book I and incidental notices there and in Books III-IX

i. The first twentyfive generations

The two longest genealogies used by Herodotus are those of the Spartan Herakleids and the Spartan Aigeidai. The former goes back, somewhat sketchily beyond Herakles, to Danaos, and the latter to Kadmos. Danaos seems to be made contemporary with Xouthos (7.94), who is ordinarily the son of Hellen and grandson of Deukalion. These last are mentioned by Herodotus (1.56) and are the most ancient names except one to which he refers: Deukalion seems to be thirtyone generations before the Persian Wars. The exception is Io the daughter of Inachos (1,1) who was probably imagined as belonging to the earliest period of Greek history, some generations before Danaos.

The Lydian chronography of Herodotus presupposes, as we have seen, that he used the 39-year generation for Sparta, and we may suppose that he employed this by simple extrapolation for the ancestors of his Spartans. Deukalion 39 x 31 years before 480 would then begin in 1689, and Io some centuries earlier, which gives Herodotus a good span of supposed national history, and a far more distant horizon than is generally supposed. We may follow his genealogies downwards from point to point, and examine his events in this context.

α. ethnogenesis of Hellas and Persia

If Deukalion belongs to the 31st generation before the Persian Wars, his son Hellen is dateable to 1650, and Doros to 1611. Danaos is apparently contemporary with Doros' brother Xouthos, and Herodotus would assume that Xouthos' sons, Ion and Achaios, would

THE GENERATION-DATED HISTORY OF HERODOTUS

Generations before the Persian Wars	Upper date reckoned in 39 years	The standard lists of Spartans and Hellenes		The Achaimenid phratry of Persia
1	1689	Deukalion		
2	1652	Hellen		
3	1611	Xouthos: Danaos		
4	1572	(Lynkeus)		
5	1533	(Abas)		
6	1494	Akrisios		
7	1455	Danae		
8	1416	Perseus		
9	1377	(Alkaios)		Perses
10	1338	Amphitryon	Minos 1	
11	1299	Herakles	2	
12	1260	Hyllos	Tlepolemos 3	
13	1221	Kleodaios		
14	1182	Aristomachos		
15	1143	Aristodemos		
16	1104	Eurysthenes	Prokles	
17	1065	Agis	Eurypon	
18	1026	Echestratos	Prytanis:Lykourgos	
19	987	Labotas	Polydektes	
20	948	Doryssos	Eunomos	
21	909	Agesilaos	Charilaos	
22	870	Archelaos	Nikandros	
23	831	Teleklos	Theopompos	Achaimenes
24	792	Alkamenes	Anaxandrides	Teispes
25	753	Polydoros	Archidamos	Kambyses
26	714	Eurykrates	Anaxilaos	Kyros
27	675	Anaxandros	Leotychides	Teispes
28	636	Eurykratides	Hippokratides	Ariaramnes
29	597	Leon	Agesilaos	Arsames
30	558	Anaxandrides	Menares	Hystaspes
31	519	Kleomenes	Leotychides	Darcios

Gen.	Date	MACEDON	LEMNOS	THEBES	THERA	CYPRUS
1						
2						
3						
4						
5						
6	1494			Kadmos	Poikiles	3
7	1459			Polydoros	Membliaros	2
8	1416			Labdakos		2
9	1377			Laios		3
10	1338			(Oidipous)		4
11	1299			Polyneikes		5
12	1260		(Trojan War)	Thersandros		6
13	1221		Argonautai 1	Teisamenos		7
14	1182		2	Autesion		8
15	1143		Pelasgoi 3	Theras		
16	1104			Oiolykos		
17	1065			Aigeus		
18	1026					
19	987					
20	948					
21	909					
22	870		SKYTHIA	KYRENE	BABYLON	
23	831				Semiramis	1
24	792					2
25	753				Sardanapalos	3
26	714	Perdikkas		Battos I		4
27	675	Argaios	Spargapeithes	Arkesilaos	Senacherib	5
28	636	Philippos	Lykos	Battos II	Nitokris	
29	597	Aeropos	Gnouros	Arkesilaos	Labynetos II	Euelthon I
30	558	Alketas	Saulios	Battos III	Philokypros:	Siromos
31	519	Amyntas	Idanthyrsos	Arkesilaos III	Aristokypros:	Chersis
		Alexandros				Gorgos

Gen.	Date	ATHENS	(CORINTH)	SIKYON	MEDIA	LYDIA
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11	1299					Herakles
12	[illegible]					Alkaios
13	[illegible]					Belos
14	[illegible]					Ninos
15	[illegible]					Agron
16						
17						
18						21 generations
19						
20						
21						
22						
23						
24						
25	733					Gyges
26	714			Andreas	Deiokes	Ardys
27	675		(Lypselos)	(Orthagoras)	Phraortes	Sadyattes
28	636		(Periandros)	Aristonymos	Kyaxares	Alyattes
29	597	Stesagoras	Kypselos Alkmeon	Kleisthenes	Astyages	Kroisos
30	558	Kimon	Miltiades II Megakles II	Agariste	Kyros III	
31	519	Miltiades III	Kleisthenes		Kambyses III	

be known to his readers. Thus the Greek race, and its constituent sections, have all come into being by the generation of 1572, and Danaos, ancestor of the Herakleids, is already in Argos.

The Aigeid genealogy begins a little later: Kadmos belongs to the 6th generation counting from Deukalion, for his descendant Theras is brother-in-law of the Spartan Herakleid Aristodemos (4.147). Kadmos is thus 26 generations before 480, that is, he begins about 1494.

Perseus belongs to the 8th generation, and is doubly important as ancestor of the Herakleids and the Persians. His date will be 1416, and that of his son Perses 1377: in Perses' time the Persians took their historical name (7.61,150). Before that, they had been known to the Greeks as Kephenes, and to themselves as Artaioi: the former name is associated with that of Kepheus, the grandfather of Perses. The nation would then exist in his generation (1494), but not take the Persian name until 1377. Herodotus thus sees the combatants in his great contest as existing in their historical national forms by the fourteenth century, exactly nine hundred years before the close of the last campaign he records. Already before this, there was antagonism between their ancestors; so that Herodotus' Histories have a century for every year of Homer's Troy.

It is in this context that we must understand Herodotus' rejection of the Skythic tradition that they were the youngest of all nations (4.5), being 1000 years old in 513 B.C. (4.7). A Skythic origin in 1512 would make them older than the Kephenian Persians of 1494, and little younger than the Greeks themselves.

β. Dates in the Heroic Age

1. The only hero of the Trojan War in the Herodotean dating scheme is the Aigeid Thersandros, a late-comer to the war, and non-Homeric. He places the war in the twelfth generation, contemporary with the Herakleids Hyllos and Tlepolemos: 1260-1222 (4.147, 6.52). Minos is two generations before Troy (7.171): this is the Homeric genealogy, and places Minos in the generation of Amphitryon (1330-1300). Amphitryon's Taphian war and dedications to Apollo Ismenios occurred before his marriage, and therefore by definition before his "generation": Herodotus accordingly dates the dedications to the generation before, that of Laios: 1377-39 (5.59). This detail shows the care and precision of Herodotean chronography.

2. The Minyai of Lemnos arrive in Lakonia in the generation of Theras: 1143=1105 (4.147), two generations (4.145) after the Argonauts visited Lemnos. The Argonauts thus belong to the generation of Teisamenos, one generation after Troy: this is a non-Homeric tradition. The Pelasgoi from Attika drove the Minyai out of Lemnos (6.137), and according to this dating left Attika in the generation of the Return.

3. Herakles (1299-60) is the common ancestor of Spartan and Lydian kings: in Sparta he belongs to the 21st generation before the Persian Wars; in Lydia to the 26th generation before Gyges. From 1299 to 723 (accession of Gyges) is 576 years, of which the last 22 generations occupy 505 years (=23 x 22 minus 1). So 71 years are left for the first four generations (=17 x 4 plus 3), which seems impossibly short. But Herakles began his career at 18 years of age, that is, 21 years before his "generation" in 1299, so that the first four Lydian generations may be allowed

up to 71 plus 21 = 92 = 23 x 4 years, which gives the same average as for the last 22 generations. We need not hesitate to ascribe to Herodotus such precision in the matter of Herakleid dates, both in view of his dating of Amphitryon's dedications, and the fact that Panyasis, one of the authorities on the life of Herakles, was a close relative.

The early Spartan and Lydian generations are thus related to one another on this calculation:

	Herakles (1320-)	1299-1261	
			Alkaios 1297
Hyllos 1260			Belos 1274
			Ninos 1251
Kleodaios 1221			Agron 1228
Aristomachos 1182			
Aristodemos 1143			

Agron of Lydia thus accedes 7 years before the generation of his grandfather's Dorian cousin Kleodaios, whose father Hyllos is contemporary with the Trojan War. This context suggests that the seven years 1228-2 were the seven years of Aigisthos, and that Troy consequently fell in 1229.

4. Herodotus reckons that the Return occurred in the generation of Theras (4.147) whether Aristodemos lived to reign in Sparta or not (6.52), and this Return was 100 years after the death of Hyllos (9.26) We may perhaps assume that Herodotus agreed with the general tradition that Hyllos was killed before the Trojan War, which he perhaps dated 1238-29. These years would then be included in the century, and the Return would occur before 1138, but perhaps not earlier than the beginning of the generation of Aristodemos, for he already had children before he died. On this reckoning, the Herodotean Return falls in the years 1143-38.

γ. Dates after the Return

1. Lykourgos as the uncle of Leobotes (1.65) belongs to the generation 1026-988, and is unrelated to any other date in the Herodotean scheme. Thisis natural, for Herodotus seems to be reporting a Spartan tradition which he does not accept.

2. Achaimenes and Semiramis in the 23rd generation represent Herodotus' historical horizon proper. On a 39-year reckoning, their dates are 831-793, which includes the true date of Sammuramat (regent 811-08). On a 27-year reckoning above 681, the dates are 789-63, which includes the year fixed by the end of the fifth century for the historical horizon par excellence, the first Olympiad of 776 B.C.

ii. The last six generations

Most of the detail arising in this period has already been discussed, and here we need to note only the following points:

α. Herodotus mentions, but does not otherwise date, the Messenian and Lelantine wars (3.47: Amphikrates,3.59). They presumably belong to the first generations of the historical period proper.

β. As we have already noted, Gyges, reckoned on 27-year generations, belongs to the generation of Syracuse. By synchronism with Spartan 39-year generations, he belongs to theend of the generation of the first Messenian war. The conjunction of the first Messenian war and the colonisation of Syracuse is a commonplace in Greek historiography, though probably false.

γ. In the 26th generation Perdikkas (not associated with Pheidon) goes to Macedon, and Battos I founds Kyrene. Median history begins with the originally Mannian Deiokes.

δ. In the 27th generation, the Sikyonian tyranny is established by Orthagoras (not mentioned by Herodotus). Andreas the Mageiros, his father, must have belonged to the same tribe as his descendant Kleisthenes, that is, to the Aigialeis, who claimed to be autochthonous and pre-Dorian. But we know nothing of the origins of this tyranny, and Pausanias alleges that when the Temenid Phalkes settled in Sikyon, the earlier royal house, which was also Herakleid, remained.

The Corinthian tyranny also begins in this generation.

Here also Skythian history begins. Spargapeithes should be dated about 625-01 on this genealogy, and thus contemporary with the first Greek colonies in Skythia. It is also contemproary with the Skythic "empire" in Asia, if this originally belonged to the year 613-586 B.C.

ε. In the 28th generation continuous Spartan and Athenian histories begin.

ϛ. In the 29th generation there begins (the ~~recorded~~ recorded part of) the genealogy of Cypriote Salamis, the line of Euelthon. A Euelthon of Salamis is also reported as contemporary with Arkesilaos III of Kyrene (4.162): he may be a grandson of the first Euelthon, and brother or cousin of Chersis.

G: Book II: The impact of an alien system of historical time-reckoning.

i. The kings of Egypt: α. The Saites.

The portion of his Egyptian history for which Herodotus (2.147ff) claims historical truth recognised by others than the Egyptians themselves is that of the Saite kings of the twentysixth Dynasty. He gives the first five kings 145 years, and all but two of his detailed figures are, according to modern information, precisely accurate. The average is an integer, being 29 years, but a nearer average to the dates given by the moderns would be 28 years. It is thus not provable that Herodotus added years to give an average figure which would be an integer.

The accession of Psammetichos is thus Herodotus' horizon for the historical period proper in Egypt. It is related to his general historical scheme (see p.244) by the synchronism of Apries with Battos II of Kyrene (4.159,2.161), and Psammetichos' predecessor with Senacherib of Assyria (2.141). The Herodotean Psammetichos begins, at earliest, in 675 B.C., and his Senacherib, as we have seen above, probably in 681/0: for the historical period therefore the Egyptian and other figures of Herodotus agree.

β. The Kings from Moiris to Sethos

Before the Saites, and after Moiris, Herodotus names eleven kings. Of these, he gives regnal years only to the pyramid builders (2.127, 133) and the Ethiopian (2.139). He also gives a date 700 years before Amyrtaios for Anysis (2.140), and a date for the death of Moiris, "not yet 900 years" before he was in Egypt himself (2.13). Further, Proteus was contemporary with the

Trojan War (2.112ff) which was a little more than 800 years ago (2.145). Thus Moiris, Sesostris and Pheron make up a century; then Proteus, Rhampsinitos, the three pyramid kings (who reign 112 years) and Asychis also occupy a century. Anysis, Sabakos, and Sethos are the last three names.

It is thus apparent that Herodotus has attempted, or found among the Egyptians, a chronographic framework arranged in triads of generations; that this was disturbed by the insertion of the pyramid kings into the second century, and that the lower terminus of the four triads is hopelessly confused. This may be shown:

I
- Moiris not yet dead 900 years before some date between 460 and 414
- Sesostris
- Pheron

II
- Proteus: contemporary with Troy, just about 800 years ago
- Rhampsinitos
- III
  - Cheops: 50 years
  - Chephren: 56 years
  - Mykerinos: 6 years
- Asychis

IV
- Anysis : more than 700 years before Amyrtaios
- Sabakos: 50 years (contemporary with the young Psammetichos 2.152)
- Sethos: (Senacherib, Psammetichos)

The priests with whom Herodotus conversed possessed a papyrus list of kings; that is, they possessed, whatever its state of historical accuracy, a literate tradition. But the named kings listed above include Sesostris, the representative of imperial Egypt; Pheron, the representative of the monarchy; Proteus and his contemporary Thonis, representatives of the Two Lands; Rhampsinitos, the collective of the Ramessids; Asychis, the individualisation of the twentysecond dynasty; Anysis, the type

of Egypt under Ethippian rule; Sabakos, who is all the Ethiopians; and Sethos, Egypt in the period of Assyrian ascendancy. These types do not belong to the native literate tradition, but represent generalised aspects of the history of Egypt, and are creations of popular thought. Greek history also was not a matter of chronicles until shortly before Herodotus' time, although it differed from Egyptian popular traditions in that people who in Egypt would have become literate historians remained outside that form of discipline in Greece, and so found poetical and genealogical outlets for their sense of form which the Egyptian scribe or priest found in the naturalistic discipline. Consequnetly, this Egyptian ~~rulmar~~ popular history, as shown by the Herodotean narratives, is crude compared to its Greek parallel, but operates on the same principle of historical generalisation. Herodotus thus displays a fundamental aspect of the Greek "genius for generalisation" which produced Thales and his successors, when he dismisses 330 kings in two sentences, and devotes fortytwo chapters to the incarnate generalisations of Egyptian history and experience. The resulting confusion shows how difficult Herodotus found the assimilation and reconciliation of the various elements in his sources.

ii. The divine and human periods: . the divine periods

Herodotus reports the recognition of four main periods in Egyptian history, three divine, and one human. The second divine period began 17000 years before Amasis, and the third 15000 years before Amasis. (2.43, 145). The twelve gods of the second period thus ruled for 12 x (5 x 33⅓) = 2000 years.

The gods of the first order are said to number eight, but

the upper terminus for their period is not given. However, in discussing the action of the Nile in forming Egypt, Herodotus reports how much land had been created in the past 900 years (2.13) and states that if the Nile had flowed into the Red Sea, it could certainly have filled that up in twenty thousand years, if not in half the time (2.11). This figure of 20,000 years appears out of the air, but the context suggests that it was the Herodotean upper terminus of Egyptian history. The eight gods of the first order seem however to be an error: it may be that Herodotus was informed about the eight emanations of Ptah, and failed to include the emanator with the emanations.[19]

19. The Ogdoad of Chaos recognised by the Egyptians would certainly not be given any time by a Greek thinker, and if Herodotus had known that the Ogdoad was before Creation, and that the Egyptians allowed time therefore, he would probably have commented on it. It is of course possible that Herodotus has confused an account of the Ogdoad with that of the eight emanations of Ptah.

It is thus possible that we may recover from Herodotus the figures given by his sources for the first period of Egyptian history: 9 gods beginning 20,000 years before Amasis. In that case, these gods ruled 9 x (10 x 33⅓) = 3000 years, each twice as long as the gods of the second group. The number of gods in the third group is not stated by Herodotus.

B. The human period

The human period of Egyptian history comprises 330 generations up to Moiris (2.101), or 341 generations before Psammetichos (2.142), which is said to be equivalent to 11,340 years at three generations to the century. The priests at Thebes also showed Hekataios and Herodotus 345 wooden statues, representing the generations of

high priests there (2.143), and the generations of the high priests and the kings were the same(2.142). This account raises two problems (1) the arithmetical error in the statement 341 x 33 = 11,340; and (2) the lower terminus of the 345 generations.

(1) The error in multiplication may be accounted for as follows: Herodotus has multiplied 300 by 100 and divided by 3 to obtain 10,000 years; then multiplied 41 by 33 to obtain 1353 years; then divided 41 by 3 to obtain 13 years as an integer. He has then added 10,000 and 1353, and - since to divide is to subtract - subtracted his figure of 13, thus obtaining 11,340 years. It is obvious that, not only was Herodotus inexperienced in the use of fractions, but particularly that he did not realise that his total should end in 00, 33, or 66: that is, he had never used the generation of 33 years before. We should consequently infer that this reckoning of a generation was not in common use, and probably not in use at all, in Herodotus' time. These inferences are supported by the chronographic evidence of Herodotus outside Book II.

(2) The lower terminus of the 345 generations seems to be "before Amasis", for the 330 generations end with Moiris, the 341 end eleven kings later with Sethos, so that the 345 end four kings later again, with Apries. This puts all the long-range calculations on a common base, so that we seem to have a fragmentary report of a complete system:

Years before Amasis.

20,000?	Nine (?) gods in 3000 years = 9 x (10 x 33⅓)
17,000	Twelve gods in 2000 years =12 x (5 x 33⅓)
15,000	? gods in 3,500 years [35 x (3 x 33⅓)]
11,500	345 human generations = 345 x 33⅓

The origins and meaning of this system, if it is one, are problems for the Egyptologists; the absence of any form of the common multiple "model" technique, and the divine years, mark it as non-Greek, at least in its main ideas, and Herodotus clearly took it as such.

The lower terminus of the 345 generations with Apries explains why the priests were able to give the same figure (2.143) to both Hekataios and Herodotus, although their visits to Egypt must have been quite a few years apart on the highest reckoning for Herodotus' Egyptian visit. The date of the system as a whole must be after the accession of Amasis.

iii. The comparison of Egyptian and Greek dates

Chapter 145 of Book II contains Herodotus' main discussion about the comparison of Greek and Egyptian dates. He reckons the Egyptian lower terminus as "before Amasis", and the Greek terminus as his own time. Two other termini appear for the reckoning of the date of Moiris (less than 900 years (2.13) before Herodotus' visit to Egypt, which occurred after the battle of Papremis (3.12) in 460 B.C., and before the writing of Aristophanes' Birds, which was performed in the archonship of Chabrias, 515/4 B.C.); and for the retirement of Anysis to the marshes, more than 700 years before Amyrtaios, who is dated 455-49, and perhaps later. Before discussing the nature and method of the comparison therefore it is necessary to obtain figures for the various dates as precisely as possible, bearing in mind the triadic arrangement of the Egyptian kings. The data may be set forth:

I	Moiris: not yet dead 900 years before a year in the period 460-15 B.C.	Herakles (born?) about 900 years ago. (Born 1338, career 1320-1261)
	Sesostris	
	Pheron	
II	Proteus: not yet dead 800 years before a year in the period 460-15 B.C. contemporary with Troy ?1238-29	Pan (born?) after Troy (which was?) about 800 years ago (?1238-29)
	Rhampsinitos	
	Asychis	
III	Anysis: not yet dead 700 years before a year in the period 460-15 B.C. more than 700 years before Amyrtaios 455-49	

From this it appears than Proteus died after 1229, so that Moiris would die after 1329 and Anysis after 1129. The "generation" in these cases would thus be 1362 (minus x) to 1329 (minus x) and so forth. In these dates, x is not larger than 6, for Anysis is more than 700 years before Amyrtaios in 455, i.e. at least 701 years before. Consequently the Egyptian generations are 1362/56 to 1329/3, etc., and Herodotus was in Egypt before 429/3.

In the Greek dates there is more uncertainty. Pan was born during the absence of Odysseus, i.e. 1229-0, and Herodotus is clearly thinking of the date of his birth. Herakles was born, on the Herodotean reckoning, in 1238, at least 110 years before Pan. This means the margin represented by "about" is at least 10 years, and more probably about 15, considerably larger than the six years' margin in the Egyptian reckonings. A smaller margin may be obtained in two different ways: the century is reckoned from the birth of Herakles to the beginning of the siege of Troy; or from a later year in the biography of Herakles to the birth of Pan.

The first would give the series 1338, 1238, 438; and a series for the second may be inferred: the career of Herakles begins, on our hypothesis, in 1320 with the birth of his eldest son Alkaios; the union which produced Alkaios, and which was no doubt celebrated in some detail by Herodotus' source for Lydia, would belong to the previous year. Ther series would then be 1321 (Herakles' manhood), 1221 (Pan's birth), 421. Herodotus would thus seem to have in mind (within, say, three years on either side) for his lower terminus either 438 or 421. If the year is 438, it implies that Herodotus was writing at Thourioi, and that he was in Egypt before 440 or 444/3: that is, in about 445 or earlier, Moiris (who acceded 1362/56) had "not yet" been dead 900 years. This is, presumably, a possible locution for these figures, but it seems a little strained.

If the figure is 421, it implies that Herodotus was writing after the beginning of his visit to Athens at the beginning of the Peloponnesian War, and that Book II is his latest work. Some possible, though by no means over weighty, support for the later date would seem to be contained in the fact that the 900 years to Herakles equals 23 x 39 plus 3, that is, the figure is almost a common multiple of the Lydian and Spartan generations. The 27th Lydian generation began with the accession of Gyges in 723: the 39th would end, theoretically, in 425. In Sparta, the 23rd generation from Herakles is represented in the Eurypontid line by Archidamos II, who died in 427. Thus if he were writing about 424/1, Herodotus would have in mind very clearly the chronographic model upon which his scheme in Book I is based; while his date for Moiris shows that he was in Egypt before 429/3.

iv. Incidental references to Greek datings in Book II

α. The Tyrian Herakles (2.44) is dated 2300 years ago, or about 2725 B.C. This is not connected with the rest of the material.

β. The Thasian Herakles (2.44). Kadmos is five generations before Herakles. This agrees with the synchronisms in the table (p.244)

γ. Melampous (2.49) and Dionysus (2.145). Melampous is said to have been later than Kadmos. His great-grandson Amphiaraos was at Thebes with Polyneikes, so Melampous belongs to the generation of Labdakos, the cousin of Pentheus and of Dionysus himself. Dionysus was mythically born within the lifetime of Kadmos: Herodotus would interpret this by saying that he cult was then introduced to Greece. But the "generation" of Kadmos' grandson Dionysus begins in 1416, within 5 to 8 years of 1000 years before 424/1. The text of Herodotus as it stands makes Dionysus 1600 years before Herodotus, but it is generally agreed that this is an error, arising from different methods of notation of the figures.

δ. Danaans and Achaians.(2.91 and 98). Herodotus mentions Danaos and his sons-in-law Lynkeus, and Archandros son of Achaios. The former confirms his knowledge of the ancestry of Herakles and Perseus, already sufficiently indicated; Archandros was the grandson, or remoter descendant, of Xouthos, whom Herodotus regarded as about the same time as Danaos, perhaps a generation earlier (see p. 244)

ε. Homer and Hesiod (2.53) This is the most interesting of these incidental notices: the poets are placed 400 years ago, and not more, which seems to mean about 824/1. The genealogy which is given, with variants, in the various later accounts of Homer still

extent was constructed before Herodotus' time; the version which makes Homer and Hesiod cousins (and therefore of the same generation) makes them 10th descendants of Orpheus, and therefore 13th descendants of Linos, who was the music-master of Heracles: Linos' son then belongs to the generation of Heracles. Consequently if we reckon 39 x 13 (=507) from 1320, we have 814, and if we reckon it from 1299, we have 793, for the end of the generation of Homer and Hesiod, and 692 or 631 for its beginning. There thus seems to be little doubt that Herodotus was using this genealogy to arrive at his date. The emphatic statement of the date would be explained if the genealogy had once been designed for quite another dating: Linos was cousin to Gelanor of Argos, who was driven out by Danaos. Thirteen 39-year generations after the Herodotean Danaos of 1611 would give 1143-05 as the date for Homer and Hesiod, that is, the generation of the Return.

5. Hekataios' divine ancestor(2.143). This reference is, strictly speaking, unconcerned with dating, but it is interesting to note that Hekataios' sixteenth ancestor, who was a god, is contemporary with Herodotus' generation of Eurysthenes or Aristodemos at Sparta. This is very late for divine parentage, and makes Hekataios a very junior Hellene . (His eponymous divinity is Hekate, who is as much a Carian as a Greek goddess).

v. General Characteristics of the chronography of Herodotus

The dates given by Herodotus may be grouped under four heads:

(1) from 514 onwards his method is annalistic, though incompletely so.
(2) for sixth-century Greece and Persia from the death of Kyros, he uses naturalistic material, but in the case of the Peisistratidai misinterprets it, partly through the influence of

(3) the chronographic dates, of which the latest certain example is 558 for the accession of Kyros, and the latest inferred the accession of Kleomenes in 519. All the dates before 558 are chronographic, and the whole mass of Euro-Asiatic material is most carefully worked into a single scheme of great precision. (4) the Egyptian material is naturalistic for the Saites, and chronographic, with errors and omissions, before. The Egyptian chronography (unlike the Asiatic) is probably not Greek, and Herodotus had not fully grasped the schema of his source. In the Asiatic figures, Herodotus seems to be drawing on earlier Greek work for Lydia and Mesopotamia: but of course it is possible that the two strata represent two stages in his own work, two or three decades apart.

The selection of the narrative material on which Herodotus constructs his Greco-Asiatic chronography is extremely interesting. Its basis is a construct like that of the Chronographic Model of Spartan and Athenian generations, and the pre-existence of this model is shown by the constant use of the 39-year generation. But instead of Sparta and Athens, Herodotus uses Sparta (both Herakleids and Aigeids) and Lydia, with a common upper terminus in Herakles. The interest of his family in Herakles is also shown by the work of Panyasis. The evidence of the Herodotean model, together with Kastor's thalassocracy list, goes to show that the east Greeks possessed as comprehensive a vision of national history as the mainlanders, although its documents have only in these two cases come down to us.

It is noteworthy that there is no chronographic element in Books VII-IX, while in Books III-VI the archaeology is naturalistic, or naturalistically derived, although the annals of the main narrative are incomplete. In Book I, chronography is fully developed in a Greco-Asiatic system; in Book II, an alien system is partially comprehended, and compared with the Greco-Asiatic scheme. This order of complexity suggests that Books I and II have been finally revised, while Books III-VI to judge from the absence of numbered years inthe main narrative have not passed their final revision. But since it is impossible to show that the necessary information was available to Herodotus, this estimate lacks certainty. All that can properly be said is that in his chronography, as in his annals proper, Herodotus is precise and consistent within the limits of his information, and so far as we can tell fully abreast of the chronographic theory of his time.

VI. Chronography in Thucydides

Only two series of dates, and two individual numbers, in Thucydides can be suspected of a chronographic origin, those for the heroic age and for the Sicilian colonies, and those for the Korkyraean war and the Plataian alliance.

A. The heroic dates

These are that the Boiotoi came from Arne in the 60th year after Troy, and the Dorians came to the Peloponnese in the 80th year (1.12); and that Melos had been inhabited for 700 years by 416 B.C. (5.112). The last date takes us back to about 1116, and the model date for Aristodemos (1143-1105). This suggests that Thucydides dated the Return about 1143, the conquest of Boiotia about 1163, and Troy about 1222. These are the dates for Troy and Boiotia in the chronographic original of the Athenian king-list in the Excerpta Barbari.

B. The Plataian alliance (3.68.5)

The Athenian alliance with Plataia is dated to the 93rd year before the destruction of that city in 427 B.C., and the date is therefore 519, 39 years before 480, and the first chronographic year of Kleomenes' reign.

C. The war of Corinth and Korkyra about 664 B.C.

See chapter III note 31 above (page 73)

D. The Sicilian dates (6.3ff)

The Thucydidean tradition of the Sicilian colonies is of cardinal importance for the history of the archaic period, and closely linked with many of our other sources, such as Pindar and his scholiast, Ephoros and his follower pseudo-Skymnos, and others. Since orientalising (especially Protocorinthian) pottery

is dated by the Thucydidean Syracuse, and Early Corinthian pottery by the Thucydidean Selinous, the source of the literary tradition of the dates is an exceptionally emphatic problem. The following sections deal exclusively with the literary evidence: the archaeology is called upon for the internal relative dating only.[1] The discussion proceeds under the following heads:

1. The most recent review of the archaeology is T.J.Dunbabin, The Western Greeks (Oxford 1948)

i. apparent chronographic and non-chronographic dates in Thucydides
ii. the Eusebian tradition of the Sicilian colonies
iii. the Eusebian tradition of other western colonies
iv. Antiochos, Diodoros, Ephoros, pseudoScymnos, Timaios
v. other year-datings: Selinous
the Marmor Parium on Syracuse
vi. comparison of Thucydidean and other generation datings
vii. absolute dates in the original document
viii. reconstruction of the original document, and archaeological evidence
ix. historical dating.

i. Apparent chronographic and non-chronographic dates in Thucydides

Thucydidean figures which do not immediately lend themselves to chronographic interpretation are the 1 year from Naxos to Syracuse,[2] the four years from Syracuse to Leontion, the 70 years from Syracuse to Akrai, and the ~~x~~ 100 years from Megara to Selinous. In contrast, there are an equal number of figures which are almost certainly chronographic in origin, namely the 135 (= 27 x 4) years from Gela to Akragas, the 45 (= 27 x 1⅔) years from Naxos to Gela,[2] and the 90 (=27 x 3⅓) years from Syracuse to Kasmenai.[3] The figure of 245 years of the existence of Megara is a particularly important figure, to be discussed in detail below.

These figures suggest that Thucydides' account owes much to the application of chronographic technique, but is not wholly dependent on it.

ii. The Eusebian tradition of the Sicilian colonies

A list of Sicilian colonies appears in two versions in the Eusebian Kanones, and the dates (in years of Abraham) may be set forth as follows:

Jerome	Armenian	Colony
1276	1280	Naxos
1278, 1279, 1280	1282	Syracuse
1276, 1281	1282	Katane
1298, 1299, 1300	1300	Chersonesos Mylai
1325, 1326	1326, 1330	Gela
1369, 1370	1260	Selinous (and Zankle in the Armenian)
1387, 1388	1389	Lipara
1416	1418	Kamarina

Examination of these figures show that the variants (apart from the 1260 dates) may be reduced to a single chronographic series, to which the figures 1281 (Katane), 1299 (Chersonesos), 1326 (Gela), 1389 (Lipara) and 1416 (Kamarina) belong, as shown below. To bring Jerome's date for Selinous into this series, we need to place that colony in the year 1371. The remaining figures for these colonies are chronographic variants of no

significance (except the Armenian's figure for Gela[4]), and the 1276 in Jerome for Katane, which belongs to a series of numbers affecting the first three colonies.

Thucydides places Syracuse 1 year after Naxos, and Katane 4 years after Syracuse; the Armenian places Naxos in 1280, and Syracuse and Katane together at a year which should be read as 1281, as the figures 1326 and 1389 show. Jerome has Katane in 1281 (as the later figures show) and Naxos (not Syracuse) five years earlier: his unanchored Syracuse wanders between its two neighbours, and the F recension has even retrodated Katane to the year of Naxos. The Eusebian list therefore clearly comes from Thucydides' source, and its structure may be shown:

	1280	Naxos
27 x 2/3	1281	Syracuse and Katane
	1299	Chersonesos Mylai
27 x 1	1326	Gela
27 x 1 2/3	(1371)	Selinous
27 x 2/3	1389	Lipara
27 x 1	1416	Kamarina

The entry in the Armenian at the year 1260 gives the names of Selinous and Zankle in Sicily, and "Calicum" and "Likonia" in Italy. On these Sicilian cities, we may note the possibility that Selinous and Zankle stand for their mother-cities, Megara and Cumae, and that if this entry belongs to the same system as the rest, it was a back-count of 27 x 2/3 years from Syracuse at 1278; so introduced into the manuscripts after the "correction" of Naxos to 5 years before Katane in 1281, and the beginning of the wanderings of Syracuse.

iii. The Eusebian tradition of other western colonies

These dates are:

Jerome	Armenian	Colony
	1242 1243	Pandosia and Metapontion
1261	1260	"Calicum" "Likonia," Trapezous in A Kyzikos in J
1308	1308	Kroton and Sybaris
1309 1310 1312		Taras
1334 1337 1338	1341 1343	Lokroi, Kyzikos
1423	1419 1420	Massalia

This list is more damaged than the Sicilian, to which however it shows its kinship by its general structure. The year 1242 is 27 x ⅔ before the remarkable collocation at 1260. The Italians here may be due to the presence of Kyzikos in J, for the second entry of Kyzikos (with Lokroi) is also a place of considerable confusion, in which the figures 1334 and 1343 are 27 x ⅓ years apart, suggesting the coalescence of two originally separate entries.

It appears therefore that the Italians at 1260 have been transferred from an association with the second Kyzikos entry, and have carried up Pandosia and Metapontion with them, so that the 1260 Italians should be taken down to 1334/43, and those at 1242 similarly reduced. The two Eusebian lists may then be combined:

	<1263>	<Cumae and Megara>
27 x 2/3	1280	Naxos
	1281	Syracuse and Katane
27 x 2/3	1299	Chersonesos Mylai
27 x 1/3	1308	Kroton and Sybaris
	1309	Taras
27 x 2/3	1317 or 1326	Pandosia and Metapontion
	1326	Gela
27 x 2/3	<1335> <1344>	Calicum, Likonia and Lokroi
27 x 1	<1371>	Selinous
27 x 2/3	1389	Lipara
27 x 1	1416	Kamarina and Massalia

iv. Antiochos, Diodoros, Ephoros, pseudoSkymnos and Timaios[5]

A number of fragmentary authorities are of assistance in determining the relative order of names in the list, both by

2. Leontion is "in the fifth year" after Syracuse, i.e. 4 complete years after. Similarly Gela is in the 45th year after Syracuse, i.e. 44 complete years after. The dates may also be rendered as 5 and 45 years after Naxos.
3. The sum of 70 years from Syracuse to Akrai, and 20 years from Akrai to Kasmenai.
4. for which see below, section vii
5. see also Dunbabin's treatment of these sources, WG pp.435ff

agreement and contrast. Antiochos has Sybaris earlier than Kroton, in which he agrees with pseudoSkymnos, who gives the date for Sybaris as 720, while Dionysius dates Kroton at 710. After Kroton, Antiochos has Taras, then Metapontion, and Siris. This confirms our placing of Metapontion, and Pandosia probably represents Siris, or the first stage in the settlement of Siris.

Diodoros seems to put Kroton and Sybaris together, then Taras,

Gela, Rhegion, Lokroi. This suggests that the coalesced entries at 1335 and 1344 once were the places of Rhegion and Lokroi, while Calicum and Li onia, as Mr. Burn has suggested to me, may represent Kaulonia, xxxxxxx colonised from Aigion before the middle of the sixth century on the site of an earlier Italian settlement, seemingly called Klete (Dunbabin, pp. 47f, 85f).

Pseudo-Skymnos is interesting for the series Leontion, Zankle, Katane, thus placing Zankle between the two cities which Thucydides dates 4 years after Syracuse. This author also adds Himera (undated) to the list of names: Diodoros' date is 649.

Ephoros employs some certainly non-Thucydidean material, making Naxos and Megara the earliest settlements, and Syracuse Kroton and Korkyra contemporary and very soon after Naxos and Megara. Lokroi is a little later than Kroton and Syracuse. This adds nothing to the Thucydides-Eusebius tradition, except to underline the suggestion of Megara 18 years before Syracuse. We may mention here the general belief that Ephoros had a very early year-date for the first colonies. Both Strabo and pseudo Skymnos say that he placed Naxos and Megara in the 10th generation after Troy. This in incredible: the upper datum must have been the Return, which Ephoros placed in 1089 or 1069.[6] The tenth

6. The ease with which upper termini of this kind may be interchanged is fully borne out by personal experience, and by the muddled termini which often appear in the Eusebian tradition.

39-year generation after 1089 began in 730, so Ephoros probably shared the Thucydidean date for Naxos and (approximately) Megara.

The redoubtable Timaios only concerns us here for his dating of Korkyra 600 years after Troy. This would seem to mean in the 16th year of the 15th generation after Troy, and imply a

reckoning of five generations from Troy to the Return. This reckoning could be based on the odd Herakleid genealogy, attributed to Asios of Samos[7], where Herakles' mother Alkmene is the daughter of Amphiaraos, the hero of the Theban wars, and sister therefore to Alkmaion. The fife generations would then be Alkmene, Herakles, Hyllos, Kleodaios and Aristomachos; and the Rhodian settlements in Italy attributed to Tlepolemos son of Herakles would belong to the third generation after Troy, and two fullvgenerations before the Return. Timaios was, it would seem, out to prove the mainland Greeks comparative upstarts, in contrast with the westerners.

On the relevant evidence from Antiochos, Diodoros and Ephoros, we may now reconstruct a possible original list for Eusebius on the following lines:

<1263> <Cumae> (Megara added from another source?)
1280 Naxos
1281 Syracuse, Katane (coalescence of notices), Zankle, Leontion
1299 Chersonesos
1300 Kroton (and Sybaris, probably by coalescence)
1309 Taras
<1317> Metapontion and Pandosia (Antiochos)
1326 Gela
<1335> Rhegion (Diodoros)
<1344> Lokroi and Kaulonia (cp. Diodoros) (coalesced)
<1371> Selinous
1389 Lipara
1416 Kamarina and Massalia

v. Other year-datings: α. Selinous

The Eusebian list as restored agrees with Thucydides in reckoning 135 (=27 x 5) years from Syracuse to Kamarina. In Eusebius however Selinous is 45 years before Kamarina, while in Thucydides this is the date of Kasmenai. Moreover Diodoros dates Lipara to 580, i.e. 18 years after Kamarina, not 27 years before.

These differences suggest that the Eusebian list should have <1371 Kasmenai> 1389 <Selinous> and <1434 Akragas and Lipara>. Selinous 18 years after Kasmenai in 643 will then be dated to 625 in the Thucydidean-Eusebian tradition, and Megara to 725. The period of 245 years for the existence of Megara is then 725-481: since this dates the fall of Megara 27 x 9⅓ years after the foundation of Syracuse, the figure is chronographically derived, being the distance between 725 (=754 (Naxos) minus 27 x⅓) and 481 (=733 minus 27 x 9⅓).

The 242 years of Selinuntine existence in Diodoros may be added to the 100 years of Megara before the founding of Selinous to give a total of 342 = 27 x 12⅔ years of Megarian communities in Sicily, with Megara founded in 751, eighteen years before Syracuse, as we have restored in the Armenian. This is quite a different reckoning from Thucydides and Eusebius, and must be considered in association with the early date in the Marmor Parium for Syracuse.

β. The Marmor Parium on Syracuse

The Marmor Parium states that Syracuse was founded by Archias the 10th descendant of Temenos, in the 21st year of Aischylos the archon: its year date is unfortunately lost. The possible existence of a Temenid phratry at Corinth has been discussed above (chapter III section A) and also the known chronographic variants for the dating of Aischylos.(section C ad fin). We saw reason to believe that the oldest chronography of this period in Athens gave Aischylos 23 years and Alkmeon 12: so that Aischylos would be dated 788-66. If the Marmor used this dating, its year for Syracuse would be 768.

Such a reckoning implies Naxos in 769, which is 18 years before Megara in 751, instead of the 9 years of the Thucydidean-Eusebian tradition (Naxos 734, Megara 725).

The long chronography thus seems to affect Naxos, Syracuse, Megara, and Megara's colony Selinous, and perhaps Himera, but no other traceable dates, and it is probably not due to Ephoros. The motive for raising these dates is probably the story that Taras (founded 710 or later) came at the end of the first Messenian War: Naxos, Megara and Syracuse are then placed before the war, in the same relation to it as they are in the short chronography, which dates the post-war colony Lokroi about 670. This is an argument additional to those already adduced (in chapter III A above) for a seventh century date for the first Messenian War.

vi. Comparison of Thucydidean and other generation-datings

We may now compare the long and short chronographies by generations as follows, for Syracuse in 733 = 490 plus 27 x 9, and Naxos in 769 = 490 plus 27 x 10⅓:

Long chronography	Generation	Short Chronography
Naxos, Syracuse	3	
	10.1	
Megara (Armenian)	2	Cumae (Armenian)
	3	
(Kroton and Korkyra contemporary with Syracuse in Ephoros)	9.1	Naxos, Syracuse, Leontion Zankle (Ephoros) Katane
	2	Megara, Sybaris
	3	Chersonesos-Mylai
(Taras at the end of the first Messenian War)	8.1	Kroton and Korkyra Taras
	2	Metapontion and Pandosia
	3	Gela
	7.1	Rhegion (Diodoros)
	2	Lokroi, Kaulonia, Akrai
	3	
Selinous (Diodoros)	6.1	(Himera in Diodoros)
	2	Kasmenai
	3	
Lipara in error in Eus.	5.1	Selinous
	2	
	3	
	4.1	Kamarina and Massalia
	2	
	3	Akragas and Lipara

This comparison suggests that Ephoros knew the long chronography, and that it affected his relative dating (though, as we have seen, probably not his relative date for Naxos). Its influence will account for his early date for Megara, his statement that Syracuse (on the short list) and Kroton and Korkyra (on the long list's relative dating) were contemporary, and his dating of Lokroi (at the end of the first Messenian war, like Taras) not long after Syracuse and Kroton. Similarly Kroton (on the short list) and Taras and Lokroi (on the long) are contemporary, as Pausanias makes them, both in the time of Polydoros of Sparta. Another conflation f the two lists accounts for the story that Archias (in 733) picked up some stragglers in Italy left by the Megarians (in 751). Thus all the dated and undated variants in the tradition may be accounted for by the development of a long

chronography to suit the high date for the first Messenian War, and this apparently was constructed between the time of Thucydides and that of Ephoros. The long list itself did not alter the relative sequence of the foundations, so that this sequence may be taken as a single literary tradition.

vii. Absolute dates in the original document

We have comparable Thucydidean and Eusebian dates for four Sicilian colonies, Naxos, Syracuse, Gela, and Kamarina; Naxos is in 734 and 737, Syracuse in 733 and 736, Gela in 689 and 691, Kamarina in 598 and 601. In three cases, Eusebius is three years earlier than Thucydides, and this may be accounted for canonographically, by the coalescence of Syracuse and Katane at a time when the MS gave Syracuse a date two years after Naxos, i.e. the same time as the insertion of the 1242 and 1260 entries. The whole western colony list has therefore been revised at this stage in the transmission. Traces of the older dating remain in the entries for Gela at 1330 (A: for 1326), Taras at 1312 (J: for 1309), Lokroi at 1338 (J: for 1335) and Massalia at 1419 (A: for 1416). Jerome's entry of Massalia at 1423 is probably a wrong Olympiad for the old 1419 dating.

viii. Reconstruction of the original document

We may now reconstruct the original document of the short list as follows:

Gen.	Date	Colony	Source and Comments (pp. refer to Dunbabin)
10.2	751	Cumae	restored from the Armenian's Zankle: about 20 years before Syracuse (p.3)
	734	Naxos	Thk. Unexcavated (p.8)
9.1	733	Syracuse	Thk. Datum for Proto Corinthian (p.301)
	729	Leontion	Thk. Unexcavated (p.10)
		Zankle	Eph. An eighth-century deposit known (11)
		Katane	Thk. Unexcavated (10)
9.2	725	Megara	Thk.-Eus. restored. Nothing found earlier than c700 (p.455).
	720	Sybaris	ps.Skymnos: this is 9 years after Leontion. Perhaps colonised Poseidonia by 700 (p.24)
9.3	715	Chersonesos	Eus. with date reduced three years
8.1	706	Kroton	Eus.: Dion. Hal dates to 710 - a wrong Olympiad
		Korkyra	Eus.
	705	Taras	Eus. with date reduced three years. Earliest pots c700-675 (p.28)
8.2	697	Metapontion and Pandosia: relative dating of 18 years before the 1260 entries in the Armenia. Place in the list given by Antiochos. Metapontion dated c700 on a terracotta head (p.32)	
8.3	688	Gela	Thk.-Eus: Thk's date should probably be a year later (i.e. 45 years complete after Syracuse), as Eus. is only 2 years earlier, not 3 as elsewhere.
7.1	679	Rhegion	Sequence in Diodoros, coalesced and retro-
7.2	670	Lokroi	dated entries in Eus. Confusion probably
		Kaulonia	partly due to dating of 1st Mess. War. These short dates belong to the short chronography of the war, and Dunbabin (441) is wrong in associating Diod.'s Rhegion with the second war.
(7.3)	c663	Akrai	Thk.: probably an estimated, non-chronographic date. On the pots would be dated 640-25 (p.100)
(6.1)	(649	Himera)	Diod. No archaeological evidence (p.300)
6.2	643	Kasmenai	Thk. Eus. has Selinous at this place. Site unknown (p.102)
5.1	625	Selinous	Thk. Eus has Lipara at this place. Datum for Early Corinthian (p.301)
4.1	598	Kamarina and Massalia: Thk-Eus.	
4.3	580	Akragas and Lipara: Thk.Diod. Pots c575 at Lipara (p.328n)	

x. Historical dating

From the preceding list it appears that given the Syracuse and Selinous dates, the relative sequence is confirmed by the archaeology of Cumae, Syracuse, Zankle, Taras, Metapontion,

Kaulonia, Locroi, and Selinous (p.458), while dates about 20 years later are suggested for Megara (p.455) and Akrai (p.100). These two instances are not sufficient to upset the list as a whole, especially since there is a variant dating of Megara 18 years after Naxos, and the date of Akrai appears in Thucydides as a stepping-stone to the date of Kasmenai, which is chronographic.

The list as a whole is a chronographic construct. The non-chronographic intervals are the single years separating Naxos and Syracuse (Thk), and Kroton and Taras (Eus); the five years from Naxos to Leontion (Thk, Eus), the 70 years from Syracuse to Akrai (Thk), and the 100 years from Megara to Selinous. The first three are presumably due to local tradition; the 70 years is perhaps an estimate of the difference in years between Akrai and Kasmenai: the archaeology suggests that the estimate was faulty. The 100 years is the difference between two chronographic figures, Megara being 27 x 1/3 years after Naxos, and Selinous 27 x 4 years after Syracuse. The 245 years of Megarian existence is similarly a chronographic derivative, being the difference between (734 minus $27\times1/3$) and (733 minus 27 x 9/3). The 100 years from Megara to Selinous were used in a different chronographic construct in the long chronography. Thus it would appear that no significant non-chronographic elements survive analysis, except the 70 years of Akrai, which is also at odds with the archaeology. The long chronography has no historical value.

From these circumstances, it is to be inferred that the chronographic generation in the western colony dates has the same value as the chronographic generation elsewhere, that is, that it represents roughly the archaeological quarter-century. This is

important for the relative dating: for example, it gives a century from Syracuse to Selinous, a quarter-century from Selinous to Kamarina, and a century from Kamarina to Marathon. It is even more important for the absolute dating, for this literary evidence requires the reduction of the date of Syracuse by about 20 years, which may perhaps meet the needs of the archaeologists; Megara comes down to the last decade of the eighth century, orthe first decade of the seventh; Gela to about 674, and Selinous to 615. That is to say, dates in the eighth century lose 20 years, those in the seventh move down into the next decade, and those in the sixth belong to later years of the same traditional decade.

The reduced dating in detail is shown exempli gratia in the following table, where the upper dates emphasize the fact that the generation of Archias "the tenth Temenid" implies that the generation count after the Return at Corinth began a generation later than that at Sparta.

Two main reasons have in the past been given for rejecting the suggestion that the western colony dates are generation-dates: the precision and apparent accuracy of the tradition, in dealing with events so few years apart; and the absence of genealogies upon which the reckoning could be based. Our analysis has shown the survival into the chronographic construct of some relative datings such as Naxos/Syracuse, Kroton/Taras, and Naxos/Leontion which are probably based on local tradtion, and all these refer to small intervals of time in a period three centuries before Thucydides. We should therefore infer that local tradition was very strong, strong enough to establish the relative sequence without doubt,

and to maint in some of the relative year-dates. The reason why precise chronographic dates were preferred to naturalistic ones may perhaps be inferred from an example given from modern colonial history by Dunbabin (p.450), who shows dates for the foundation of Melbourne in 1837, 1835 and 1838. Since we use years A.D., the variants are immaterial, but at the time of the construction of this list, the Greeks had no such technical aid, so that "nine generations before Marathon" filled a very definite need of providing a date which was recognisable to any Greek, and translateable into the eponymous years of any city.

The contention that genealogies were not available in the west is an assumption which neglects the nature of Greek social organisation. The anchisteia had a strong tendency to endogamy, with the result that in almost every generation one member would appear in both the paternal and maternal lines of his descendants. Consequently, in a community organised in anchisteiai, one genealogy would give practically the same results in generation-count as another: the statistics were, so to speak, incarnate in the population at large, and royal genealogies were notneeded for dating purposes.

The characteristics of the list give some indication of the time and place of its construction. The third of a generation is not known to Herodotus, so the list probably dates after his time. The lower terminus of 490 is pre-eminently Athenian, though not exclusively so, and the interest of Athens in the west is acute from the foundation of Thourioi to the Syracusan expedition. The invention of the third of a generation speaks for a mind more

prone to abstract mathematical thought than to the kind of historical attitude which sees events as conducted only by concrete and individual personalities without whose fleshly presence their attributes cannot be imagined. All this suggests a western or Athenian Pythagorean working about 425-15. There is no obvious candidate, perhaps because of the conventions of Pythagorean publication.

6. With this interpretation of the traditional dating as being a disciplined and formal representation of material based on anchisteia and oikos generations, the foundation legends of Taras and Lokroi, as well as the legislation of Zaleukos, assume a new importance. The colonists of both Taras and Lokroi are said to have been Spartans and Lokrians on their mothers' side only. We have already seen reason to believe that the relations between anchisteia and oikos in Sparta were changed by Lykourgos in the second quarter of the sixth century; these colony stories, stripped of their romantic elements, suggest that in the first half of the seventh century membership of the anchisteiai was made conditional on membership of an oikos. The persons excluded from anchisteiai on these grounds would include illegitimate children of freeborn women, but it is incredible that colonies could be recruited from this class alone. (The incredibility of the assertion to the ancients probably accounts for the part played in the legends by the first Messenian War, which is based on the story of the Skyths in Hdt.4.1. The reason for the failure to remember other classes of persons concerned is presumably that such classes no longer existed, and their earlier existence had been forgotten, or denied in the interests of the new order.) The foundation legends however assimilate all the colonists of Taras and Lokroi to this class, so that we should interpret them to mean that the metropoleis up to this time possessed social organisations of a kind which admitted to the unitary social grouping - the anchisteia or its ancestor - persons not of fully established male descent. Some indication of possible classes of persons of this kind may be gathered from comparative anthropology. The Namoos of Tongo on the Gold Coast are a peasant people organised in clans, lineages, and households, and the lineages (corresponding approximately to the oikos) are of three kinds: authentic lineages, which trace their descent in the male line; attached lineages, descended (in the male line) from a daughter of the authentic line, and arising either from the relationship between mother's brother and sister's son, or (traditionally) from the return of a divorced wife and her children to the paternal home; and assimilated lineages, claiming descent from a kinsman of the authentic line - this kinsman sometimes also being described as a slave or refugee. (See

M. Fortes, The Dynamics of Clanship among the Tallensi (Oxford 1945) p. 40). The importance of the mother's brother at Sparta is evidenced by the myth of Theras, so that probably in the Partheniai we should see "sisters' sons" corresponding to the attached lineages of the Namoos, whose title to membership of their mothers' oikoi was abolished at Sparta in the generation of Theopompos. At Lokroi, we may have also a parallel case, for the colonists (or Timaios on their behalf) laid great stress on their descent from the Hundred Oikoi of old Lokris, while Aristotle and others regarded them as being outwith any social organisation. It may be supposed, perhaps, that the social organisation of old Lokris before the formation of the Hundred Oikoi was more primitive than that of Sparta, and the contrast with the new order the more violent, thus engendering both the polemics about the social organisation of the colony, and the extraordinary development of the myth and ritual of Aias and Kassandra, which is concerned with the rights and relationships of the sexes. (I have no suggestions to make about the precise form of the older social organisation in Lokris: the possibilities are innumerable.) A new order in social organisation in violent contrast to the old would also help to explain the need for a legislator in the colony during its first generation, as well as illuminate the story of the contemporaneity of Zaleukos and Lykourgos, which emphasizes their common interest in the oikos and social organisation. Zaleukos seems to have been interested in the permanence of his laws and the inalienability of klēroi; he is also said to have laid down fixed penalties, not leaving their assessment to the courts; he did something about contracts, about disputed property, and revenge. All these subjects are matters of social organisation and its stability, and might be expected to arise in a community whose morals were confused by recent substantial developments in the metropolis.

These are the only two cases where colonial datings might have been upset by the existence of a non-anchisteian generation, and the sequence in these cases is archaeologically confirmed. We may conclude therefore that whatever the old order in the metropoleis, the colonists possessed some form of the normal anchisteia and oikos system of social organisation.

Spartan synchronisms (25-year gen.)	Gen.	Date	Colony	Comments
	10.2	c735	Cumae	10 chronographic, 20 archaeological, years before Syracuse
Alkamenes	10.3			
		c716	Naxos	1 year before Syracuse
	9.1	c715	Syracuse	9 generations = 225 years before Marathon
		c711	Leontion	5 years after Naxos
			Zankle	
			Katane	
	9.2	c707	Megara	earlier alternative
		c702	Sybaris	
Theopompos	9.3	c699	Mylai	later alternative for Megara
	8.1	c690	Kroton	
			Korkyra	
		c689	Taras	1 year after Kroton
	8.2	c682	Metapontion	
			Pandosia	
Polydoros	8.3	c674	Gela	
	7.1	c665	Rhegion	date of Messenian reinforcement, not of first Zanklaian settlers? 9
	7.2	c657	Lokroi	
			Kauloria	
Eurykrates	7.3	(c650)	Akrai	possibly a false date
	6.1	(c640)	Himera	unconfirmed
	6.2	c632	Kasmenai	
Anaxandros	6.3	c624	Selinous	
	5.1	c615		
Eurykratides	5.3	c599		
	4.1	c590	Kamarina and Massalia	
Leon (Lykourgos)	4.3	c574	Akragas and Lipara	

9. This chronology makes possible a much more narrow limit of dating for the First Messenian War than the Spartan traditions alone. The Messenians who went to Rhegion at the end of the First War (Paus.4.23.6) may be dated c665, and consequently the War itself c684-65, and the accession of Polydoros c680. In discussing the second Messenian settlement on the straits, Pausanias (4.23.10) mentions the date 664 B.C.: perhaps his source gave this for the foundation-date of Rhegion.

VII. The School of Eratosthenes and Apollodoros

In his Chronographia, Eusebius uses Kastor for the dynastic chronography of Greece, except for Sparta, where he employs a version of Apollodoros' list (see Appendix I). This use of Apollodoros for Sparta carries with it the dating of Troy, Ionia, and the Return. In the Kanones accordingly, the dates for these events are derived from Apollodoros, though not identical with his; and Apollodoros' dates for Lykourgos are also mentioned. Moreover it is generally supposed, and with reason, that most of the notices in the post-monarchical period in the Kanones are derived from the Apollodoran school, so that, in effect, this school is the source of the vulgate dates of the archaic period.

It would be difficult to point to any of these dates as commanding general assent among modern students of the period, in spite of considerable bodies of work in the defence of this or that series. The modern problem seems to consist of these elements: first, the amount of extrinsic evidence for the period continues to be small (being, in fact, almost limited to the Assyrian date for Gyges' death); second, the archaeological evidence is in part necessarily, and in part unnecessarily, closely associated with the literary evidence, providing independent evidence of relative but not of absolute dating, so that archaeological evidence for alteration of traditional absolute dating is a complex of evidence for relative dates, and not simple, direct, extrinsic evidence; and thirdly, the literary tradition is singularly innocent of any thoroughgoing periodisation for Hellas as a whole during

these centuries. This is not to say, of course, that in any single community the stages are not plain; in the case of Athens for instance they are clearly marked by the names of Drakon, Solon, etc., and in other communities it is reasonably certain that the same awareness of development, and general consensus about its nature, existed, but has not reached us in detail. But this awareness and consensus do not exist for Greece as a whole (except, as we shall see, to some extent for the literary professions): the "ages" of colonisation and tyranny are simply sums of individual items, and a society and its history are more than the sums of their parts. We have already discussed in some detail the historiographies of various communities, and seen that within the communities the sense of the interrelationship of the items was very strong; and in the case of the cities of Sicily and Magna Graecia, the western colony list is almost certainly a clear indication that a general historiographic view embraced all these individual poleis. There is nothing similar in the other areas mentioned in the traditional histories: neither the far west, nor the mainland, nor the Aegean, Asia, the Levant, nor Thrace, Propontis, Pontos, have left a similar compact tradition which emphasized the relationship of the various items to one another.

The first question is therefore whether the compact western (or rather near western) tradition is an accident of our sources merely, or represents an important historical fact which set the near westenn Greeks apart from the rest. In this matter, it is important that the Sikeliote portion of the near western tradition appears maturely, with a full emphasis on the interrelationships involved,

in Thucydides. But the archaeological evidence is now sufficient for it to be seen that these interrelating concepts were not the invention of Thucydides or his source: they represent relationships which historically existed. Moreover, the archaeology adds to the literary evidence the fact that for the first century of their existence, the near western Greeks formed an economic and cultural unity; and of no other comparable area is such a state of affairs predicable. It seems therefore fair to conclude that the tradition is not due to accident of source, but that the difference in the sources reflects a historical difference of fundamental importance: the near western Greeks possessed in some respects the makings of a nation; the rest of the Greek world at this time did not.[1]

1. This aspect of near western Greek culture seems to be seen in the common Italiote development of Pythagoreanism late in the sixth century; and the Sikeliote tyrannies ruling more than one city in the early fifth. The leagues and alliances of other Greeks at this period are not at all so politically advanced.

Nevertheless, it is taken for granted that Greece as a whole did form a unity, if not of the politico-economic type of the near-western Greeks. Greece possessed one language, though not a single literary dialect; it possessed territorial unity in the mainland, though divided into many states; it possessed a single general economy, though with many variations in different communities; how far it really possessed a common religion, aspirations, and thoughts it is by no means easy to say. Consequently it appears that the unity of Greece as a whole was emergent rather than achieved, and promised rather than attained, and that the differences which would bulk so large in ancient times rather tend to be obscured at this distance. When however we try to turn an equal

eye upon the evidence of unity and of difference, two stages seem to be discernible, the first from the uncertain time when Homer and Hesiod came to be regarded as the foundersof Greek literature, to the rise of Macedon, and the second from Alexander's time to that of Rome, when Greeks formed the administrative core of the Hellenistic kingdoms. In the first period, the Greeks only had to satisfy themselves of their unity; in the second, they had to maintain their cultural independence and unity in environments which were not only alien, but also of more ancient literacy than Greek culture itself. Consequently, now that we come to consider Hellenistic chronography, the central question for the modern student is how the new environment of scholarship affected the beliefs of the Greeks about their past, and what chronographic and historiographic techniques were developed to express these beliefs. The discussion falls under the following heads:

A. The assembly of evidence:
   1. Dates given for the basic eras
   2. The Spartan king-list
   3. Literary chronography
   4. Colonial chronography
   5. Religious chronography
B. The Eratosthenic mathematical scheme

C. Hellenistic historiography: this problem is far too large for treatment in these pages, so I have reserved it for discussion elsewhere.

A. The assembly of evidence

1. Dates given for the basic eras.(Eratosthenes fr.1Jac)

The fulllist of basic eras used by Eratosthenes is given by Clement as follows:

From Troy to the Return:	80 years
thence to Ionia	60
thence to Lykourgos	159
thence to Ol. 1.1	108
thence to Xerxes	297
thence to Peloponnesian War	48
thence to fall of Athens	27
thence to Leuktra	34
thence to Philip's death	35
thence to Alexander's death	12

The first question that arises is that of the kind of years Eratosthenes was using in these computations. For his last four entries we have dates in months and years as follows:

Athens fell in the 10th month of the archon Alexias (who took office in midsummer 405 B.C.)
Leuktra was fought in the 1st month of the archon Phrasikleides (who took office in midsummer 371 B.C.)
Philip died in the early months of the archon Pythodemos (who took office in midsummer 336 B.C.)
Alexander died late in the year of the archon Hegesias (who took office in midsummer 324 B.C.)

Thus we have the following correspondences:

Athens to Leuktra (34 years):	10th/405 to 1st/371: 33 years 2 months
Leuktra toPhilip (35)	1st/371 to early/336:35 years approx.
Alexander's reign (12)	early/336 to late/324: more than 12 years

The margin of error is thus at least 10 months, but less than a year in any single instance: that is, Eratosthenes is using conventional and monadic years. We must therefore translate into our conventional use of years B.C., and the fixed point is Ol. 1.1 = 776. So we have:

Troy:	1183
Return	1103
Ionia	1043
Lykourgos	884
Olympiad 1.1	776
Xerxes	479
Peloponnesian War	431
Athens falls	404
Leuktra	370
Philip's death	335
Alexander's death	323

2. The Spartan Kinglist. (Fr. 87 Jac and Appendix I)

The Spartan kinglist of Apollodoros is discussed as to text and chronographic construction in Appendix I; it is to be discussed here is relation to an earlier series of dates in the Perseid male descent line, quoted by Clement from Apollodoros as follows:

in the 32nd year of Perseus, the apotheosis of Dionysus
63 years after, Herakles and the Argo
38 years after, the apotheosis of Herakles and Asklepios
53 years after, the apotheosis of the Dioskouroi
then the Trojan War.

Thus from the first year of Perseus to the apotheosis of the Dioskouroi is 185 years, and the Dioskouroi perished after Helen was carried off, but before the Greeks sailed for Troy. Since 185 = 39 x 5 minus 10, we may infer that the Trojan War followed immediately on the apotheosis of the Dioskouroi, and occupied the Apollodoran years 1192-83. Taking this fragment and the Spartan material together, we then have:

model date	generation	Dates and Events in Apollodoros
1377	Perseus (1)	1346: apotheosis of Dionysus
1338	Alkaios (2)	
1299	Amphitryon(3)	1283: Herakles and the Argo
1260	Herakles (4)	1245: apotheosis of Herakles
1221	Hyllos (5)	1193: apotheosis of the Dioskouroi
		1192-83: the Trojan War
1182	Kleodaios	
1143	Aristomachos	
1104	Aristodemos	1103: the Return
		1068: beginning of the dyarchy
1065	Eurysthenes	1043: Ionia
1026	Agis and Echestratos	1025: accession of Echestratos
		988: accession of Labotas
987	Labotas	951: accession of Doryssos
948	Doryssos	943: Homer
		922: accession of Agesilaos
		912: Homer (see below)
909	Agesilaos	884: regency of Lykourgos

		878 accession of Archelaos
870	Archelaos	
831	Teleklos	824 accession of Nikandros
		818 accession of Teleklos
792	Alkamenes	786 accession of Theopompos
		778 accession of Alkamenes
		776 the first Olympiad
		761 the younger Lykourgos
753	Polydoros	744 the first Messenian War
		740 the fifth year of the war
		accession of Polydoros
		725 last year of the war

Thus although Jacoby places fragment 87 among the false attributions to Apollodoros, there seems to be every chronographic reason for believing it genuine. One detail is of particular interest: Apollodoros allows Herakles to begin his activity 23 years before his "generations", while Herodotus as we have seen, allowed 22 of these earlier years (see pages 246f, 257).

The Hellenistic dates for Sparta differ from those of the Chronographic Model in allowing only one year, instead of one generation, to Agis. This has the result, as we have seen, of reducing the first Spartan anchisteia to the equivalent of three generations only, even though it is earlier than Lykourgos. This reduction was probably not first made by the Hellenistic school: it is implied already in Ktesias' date for Troy (see chapter VIII), and Ephoros' date for the Return in 1089. Although its effect is to make all the Spartan anchisteiai of the same length, it may not have been primarily intended to do so: Ephoros' Return, for instance, was 720 = 36 x 20 years before the liberation of Messenia, and the new Spartan dates may have come into existence in order to accommodate some such reckoning of non-Spartan material. Since the 36-year generation is found in Corinth, it may be that the rise of a school of Corinthian chronography was one element in the

new development. In the Hellenistic school, the definitive periods would seem to be the 780 (=39 x 20) years from the fall of Troy to that of Athens, and the 780 years from the Return to the death of Alexander, while from Ionia to Alexander's death is 720 = 36 x 20 years.

3. The Literary Chronography: i. fragments of Apollodoros.

Frr.63 and 333 (Jac): Homer and Hesiod: Tatian and Clement report Apollodoros' date for Homer as 100 years after Ionia, i.e. 943 B.C. The VIth Life of Homer gives this date as from Eratosthenes, and quotes Apollodoros for "80 years after Ionia" i.e. 963 B.C. Tzetzes quotes Apollodoros for the "successions" Kadmos, Linos, Pronapides, Homer: this Kadmos was no doubt the Milesian, and the three pre-Homeric masters accound for the time of Homer after the Ionian migration (27 x 3 = 81). Jerome quotes Apollodoros for Homer in ann. Abr. 1104 = 913 B.C.; and Solinus, without naming Apollodoros, dates Homer to the reign of the same Latin king, but in 912, and Hesiod's death 138 years later, "in auspiciis olympiadis primae".

The Life of Homer is, apparently, wrong about Eratosthenes' date, which was 100 years after Troy (i.e.1083), not "after Ionia", which has probably crept in from the Apollodoran quotation. The "80 years" may well be Apollodoran, and mark the beginning of Homer's career; the 100 years will be the date of one of the great poems, nad 913 or 912 another date of a poem. Hesiod's death willbbe dated to 775 or 774.

Fr.336: Archilochos, Simonides and Aristoxenos all have their akmai in one year in Jerome, and the notice is placed at 01.28.3 =a.A.1351 by the manuscript F (which had access to the Greek of Eusebius), and

otherwise to the two following years. The Armenian gives Archilochos and Simonides at Ol. 28.4 = a.A. 1350. The concurrence of Jerome F and the Armenian in a.A.1351 establishes that year for the notice, and Jerome' s Olympic date for that year, which is equivalent to 666 B.C. This is 108 = 27 x 4 years after Hesiod's death attributed to 774 B.C.

(as emended)

Fr.28: Thales: According to Diog. Laert., Apollodoros placed the birth of Thales in Ol.39.1 = 624 B.C., and his death at 78 (=39 x 2) years of age, i.e. in 546 B.C. The year 624 is 288 (=27 x 10⅔) years after Homer in 912. Thales' second 39 years, i.e. his "generation" - of which the first year is his akme - thus begins in 585, the monadic year given for his eclipse by Jerome, and by Pliny (NH 2.12.53).

These dates for Archilochos and Thales make the lower years for Homer (912 instead of 913) and Hesiod (774 instead of 775) preferable.

Fr.29: Anaximandros: Diogenes is again the source which quotes Apollodoros for this date: Anaximandros was 64 years of age in Ol. 58.2 = 547 B.C. Therefore Anaximandros was born in 611, 13 (=39 ⅓) years after Thales.

Fr. 27: Pittakos: is said by Diogenes, probably following Apollodoros, to have had his akme in Ol.42 (612/09) and to have died in Ol.52.3 (570). Since 570 is 54 (=27 x 2) years after Thales' birth in 624, it seems probable that the akme year intended is 611, the year that Anaximandros was born.

Fr. 338: Pherekydes: is also given a date by Diogenes which may come from Apollodoros, and which is repeated by Jerome (F): Ol.59.1 = 544 B.C. This is 26 (=39 x⅔) after Pittakos' death in 570. Consequently the year for Pherekydes intended by Suidas in ol.48 was probably 583, 13 years before 570.

Fr.66: Anaximenes: his Apollodoran dates were 546 for his akme and 01.63 (528/5) for his death. The year 546 is 78 (=39 x 2) years after Thales' birth, and the year of Thales' death. The year 528 is 18 (=27 x 2/3) later.

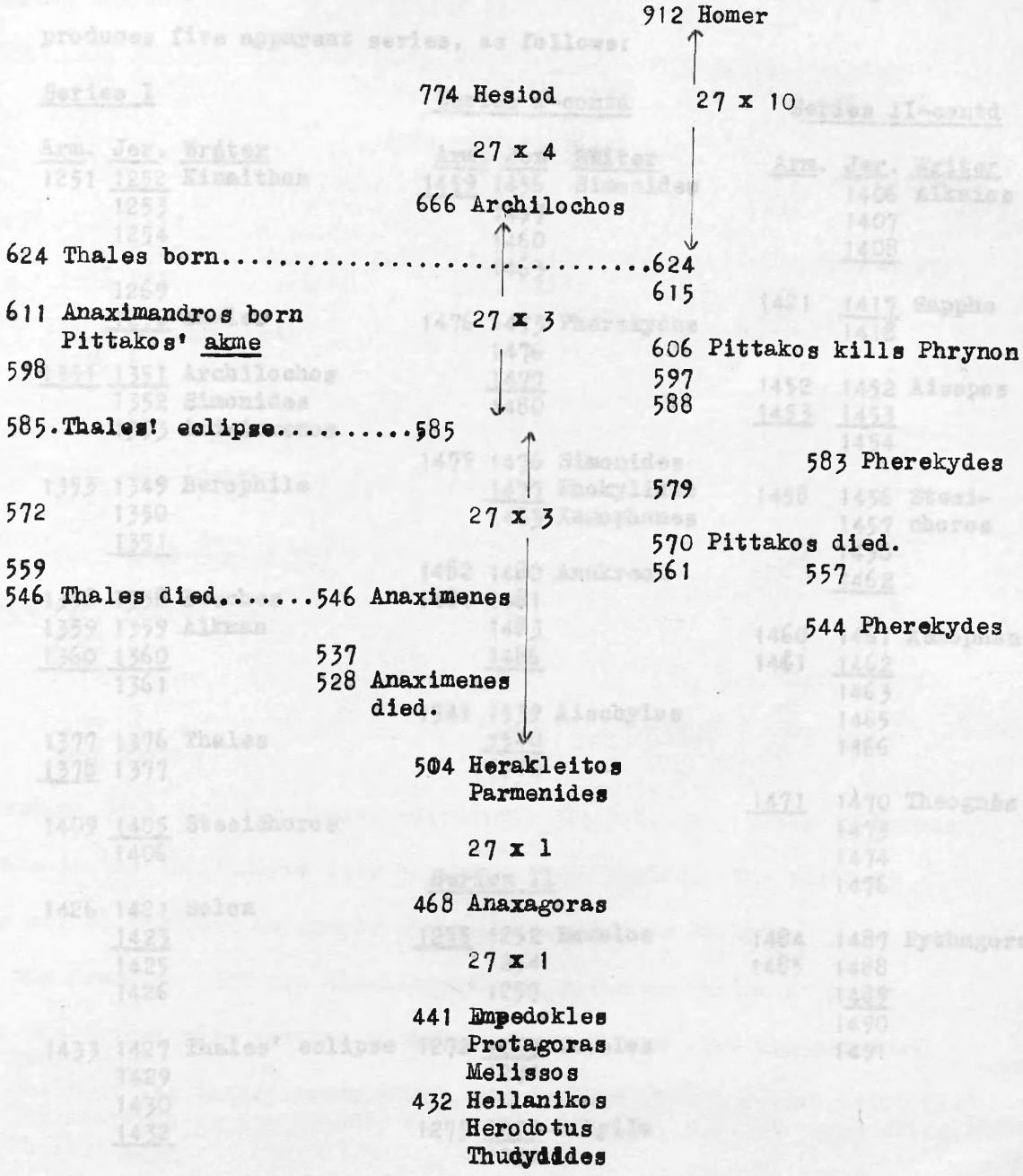
Frr. 340,341: Herakleitos and Parmenides: are both placed by Diogenes, probably following Apollodoros, in 01.69 (504/1). The year 504 is 162 (=27 x 6) years after Archilochos in 666 B.C.

Fr.31: Anaxagoras: Apollodoros is quoted for his birth in 01.70 (500/497) and death at 72 in 01.78.1 (=468 B.C.). Clearly, the year 468 belongs to some event in the life of Anaxagoras which has fallen out of the quotation. It is 36 (=27 x 1 1/3) years after Herakleitos and Parmenides in 504 B.C.

Frr. 32b, 71,72: Empedokles, Protagoras and Melissos: their akmai are placed in 01.84 (444/1). In the case of Melissos, the akme year is probably 441, the year before he was general in the Samian revolt: 441 is 27 years after 468.

Fr.7: Herodotus, Hellanikos, Thucydides: their ages at the beginning of the Peloponnesian War in 432 are quoted from Pamphile, who may be following Apollodoros. The year 432 is 9 (=27 x 1/3) years after 441.

Examination of these Apollodoran dates shows that the three 39-year dates for Thales are each made the starting-point of a 27-year series, and all the dates belong to one of these four lines, except those for Pherekydes, which form another 39-year group as a sort of appendix or addendum to the Pittakos line. These aristhmetical relationships may be shown:



ii. Literary Chronography in Eusebius

A large number of literary dates in Eusebius between the years 774 and 441 may also be chronographically analysed. The method followed is to tabulate each eantry with al l variants, and by inspection allow those which seem to be in series of 39 or 27-year

generations (or their thirds) to emerge. Such a simple inspection produces five apparent series, as follows:

Series I

Arm.	Jer.	Writer
1251	1252	Kinaithon
	1253	
	1254	
	1269	
	1270	Thales
1351	1351	Archilochos
	1352	Simonides
	1353	Aristoxenos
1353	1349	Herophile
	1350	
	1351	
1358	1358	Lesches
1359	1359	Alkman
1360	1360	
	1361	
1377	1376	Thales
1378	1377	
1409	1405	Stesichoros
	1406	
1426	1421	Solon
	1423	
	1425	
	1426	
1433	1427	Thales' eclipse
	1429	
	1430	
	1432	
1443	1439	Anaximandros
	1441	
	1443	
	1446	
1449	1449	Eugammon
1450	1450	

Series I-contd

Arm.	Jer.	Writer
1459	1456	Simonides
	1457	
	1460	
	1463	
1476	1473	Pherekydes
	1476	
	1477	
	1480	
1479	1476	Simonides
	1477	Phokylides
	1483	Xenophanes
1482	1480	Anakreon
1484	1481	
	1483	
	1486	
1541	1539	Aischylos
	1540	
	1542	

Series II

1255	1252	Eumelos
	1254	
	1257	
1272	1273	Eumelos
	1274	
1275	1273	Sibylla
	1274	
1354	1353	Zaleukos
1356	1354	
	1355	
1406	1399	Arion
	1400	
	1401	

Series II-contd

Arm.	Jer.	Writer
	1406	Alkaios
	1407	
	1408	
1421	1417	Sappho
	1418	
1452	1452	Aisopos
1453	1453	
	1454	
1458	1456	Stesi-
	1457	choros
	1458	
	1462	
1460	1461	Xenophanes
1461	1462	
	1463	
	1465	
	1466	
1471	1470	Theognis
	1473	
	1474	
	1476	
1484	1487	Pythagoras
1485	1488	
	1489	
	1490	
	1491	

Series III			Series IV			Series V		
Arm.	Jer.	Writer	Arm.	Jer.	Writer	Arm.	Jer.	Writer
	1248	Hesiod		1329	Hipponax	1241	1241	Arktinos
	1249						1242	
	1250		1384	1383	Tyrtaios			
	1251			1384			1304	Herophile
				1385			1305	
1439	1436	Seven						
	1438	wise	1410	1409	Pittakos		1373	Terpandros
	1443	men		1410	kills		1375	
					Phrynon		1376	
	1455	Anaximenes						
	1456							
	1457							
	1460							
1458	1456	Stesichoros						
	1457							
	1458							
	1462	(see Series II)						
1469	1467	Thales died						
	1469							
	1470							
	1479							
	1482	Ibykos						

Assuming that 1432 for Thales represents 585 B.C., all dates in Series I are in the Apollodoran line beginning with Hesiod. The variants may all be regarded as simple chronographic errors except:

i. the Armenian 1409 for Stesichoros: see notes on Series II below

ii. the rather wide scatter of dates suggests more than one original entry for:
Solon at 594 (=1423:Sosikrates), and perhaps at 592 (=1425:Aristotle)
Anaximandros at 576 (=1441) and perhaps at 572, i.e. 13 years after Thales' akme

iii. different reckonings for Anaximandros may be the cause of dates a complete Olympiad apart (for the difference between 13 and 9 years is 4):
Simonides at 1463 and 1459
Pherekydes at 1476 and 1480, (while 1477 is the Series date, and 1473 = 544, the Apollodoran date)
Simonides again at 1477 and 1483
Anakreon at 1482 is a complete Olympiad earlier than 1486: possibly a false correction.

Maintaining the same absolute dating, all dates in Series II belong to the Apollodoran line of Anaximenes. The variants are canonographic, except:

i. Eumelos at 1252 has coalesced with Kinaithon of Series I

ii. the Armenian omits Alkaios at 1408, and represents Jerome's 1405 (Stesichoros) by 1406 Arion, and Jerome's 1408 (Alkaios) by 1409 Stesichoros.

iii. Sappho at 1421 is a complete Olympiad later than 1417.

iv. the wide scatter of dates for Stesichoros' death suggests two original entries, one 9, the other 13, years before 546. This may be the origin of the complete Olympiad differences in this series at Xenophanes and Theognis.

v. Pythagoras may combine more than one entry with errors of a complete Olympiad.

Series III is based on 39-year generations and gives 548 for the death of Thales: Stesichoros' death is 13 years before. These entries suggest that the series is 2 years too early throughout, and that the dates of the source were equivalent to 767, 572, 559, 546 and 533 B.C. The error will arise from the double datings for Anaximandros and Stesichoros' death.

Series IV: the death of Phrynon should be in 606, i.e. in the Armenian reckoning of Olympiads. This gives the dates 687, 633, and 606.

Series V consists of only three entries, one name (Herophile) also belonging to Series I: her date here is 47 years before that. The two entries for Herophile in Jerome F at 1304 and 1349 are $45 = 27 \times 1\frac{2}{3}$ years aprt: this suggests that this series is 2 years too high, and that Arktinos in 1242 is intended to represent 01.1.3.

Thus Series I and V appear to belong to Apollodoros' line of dates from Hesiod to the Peloponnesian War; Series IV to the line from Homer to the Persian War; Series II to his Anaximenes line, and Series III to his Thales line. Even where different dates are given for the same person or event, the mathematics appear to be the same as those used by Apollodoros (except 592 for Solon, if this is correct), so that his school is dominant for Eusebius in literary chronography.

iii. Literary dates in Other Sources. There are a number of dates in other sources which also seem to belong to this system of mathematics, namely:

Series I

783: Arktinos: 400 years after Troy (Suidas)

720: Archilochos at Thasos (Dionys.)

693: Simonides 490 years after Troy (Suidas)

684?: Archilochos 500 years after Troy (Eus. etc.)

648: Peisandros (Suid)

Series IV

651?: Pittakos born Ol.32 (Suidas)

Series II

708: Archilochos at Thasos (Xanthos)

672: Alkman (Suidas)

645: Terpandros (HP): 9 years before accession of Eurykratides

Series III

754: Antimachos (Plt)

728: Diokles' Olympiad = akme of Philolaos ? (Aristot. et al.)

676: foundation of the Karneia (Sosibios) cp. Terpandros first victor (Hellanikos)

611: Pittakos and Melanchros (Suid., from Apd.)

520: Hekataios, Dionysius, Melanippides (Suid.)

The dates from all sources may now be tabulated as follows. Those attributable to Apollodoros himself are in capitals. The remainder are mostly anonymous.

Series III	Series II	Series I	Series IV
			912 HOMER
		783 Arktinos	
780	780		
	771	774 HESIOD	
		Arktinos	
767 Hesiod	762 Eumelos	765 Kinaithon	
754 Antimachos	753	756	
	744 Eumelos	747 Thales	
	Sibylla		
741			741
	735	738	732
728 Philolaos	726	729	723
715	717	720 Archilochos	714
	708 Archilochos	711 Herophile	705
702		702	
	699	693 Semonides	696
689	690	684 Archilochos	687 Hipponax
676 Karneia	681	675	678
	672 Alkman	666 ARCHILOCHOS	669
		Semonides	
		Aristoxenos	
		Herophile	
663 Zaleukos	663		
	654	657 Lesches	660
		Alkman	
650	645 Terpandros	648 Peisandros	651 Pittakos
637	636	639 Terpandros	642
		Thales	
	627	630	633 Tyrtaios
624 THALES BORN		624	
	618 Arion	621	615
611 ANAXIMANDROS b.	609 Alkaios	612 Stesichoros	606 Pittakos &
PITTAKOS			Phrynon
	600 Sappho	603	597
598	Alkaios		
	591	594 Solon	588
585 THALES' AKME		585	
	582	576 Anaximandros	579
572 Seven wise men	573 XENOPHANES(?)	567 Eugammon	570 PITTAKOS d.
Anaximandros (?)			
	564 Aisopos	558 Simonides	561 (Peisistratos)
559 Anaximenes	555 Stesichoros	549	552
Stesichoros	Xenophanes		
546 THALES DIED	546 ANAXIMENES		
	Theognis		
	537	540 Pherekydes	543
		Simonides	
533 Ibykos	528 ANAXIMENES	531 Anakreon	534
520 Hekataios	519	522	525
Dionysius		513	516
Melanippides			

507.....507

504 HERAKLEITOS
PARMENIDES
495
486
477 Aischylos
468.Sophokles and Euripides.....468 ANAXAGORAS
(Eus)
459
450
441 EMPEDOKLES
PROTAGORAS
MELISSOS
432 HELLANIKOS
HERODOTUS
THUCYDIDES

The 27-year series headed by Homer has a base-date in the year 480, which is old-established, and three dates already familiar from Athenian chronography: 606 death of Phrynon, 564 for Peisistratos the tyrant and 668 for Peisistratos the archon. There is a certain appropriate nicety in placing Homer $27 \times 13^{+1} = 39 \times 9^{+1}$ years before Peisistratos, and this happy thought seems to be attributable to Apollodoros himself: the two names are imagined as enclosing a period of development mathematically defined.

In the line of Hesiod, the 45 years from the beginning of the Athenian empire to the beginning of the Peloponnesian War was established as a historiographic period by the time of Demosthenes (though it is not recognised by Thucydides). Here again therefore, in the establishment of this line, Apollodoros seems to have had Athenian predecessors.

T The third 27-year series comes down to 519, a very well-known base-date as an alternative to 480. The year 708 in this line is quoted from Xanthos of Lydia for Archilochos, but whether from the original work of that author, or from pseudo-Xanthos, is not clear.

The 39-year series of numbers contains the dates of Philolaos and Sophokles which may be older than Apollodoros, though not necessarily connected with each other before his time. The year 676 for the Karneia may be as old as Hellanikos: in the Model dates for Sparta, this would be the last year of Eurykrates, Polydoros' successor. The year 585 for Thales' eclipse, if imagined as a monadic Olympic year, is wrong, and should be 586: since the exact date did not have to depend on tradition, but could be calculated, this error may imply that the years of one of the sources in this system were not originally Olympic years.

Inspection of the scheme so far put together suggests that although more than one mind has been at work, the table on the whole does represent a unified historiographic view. We may for instance ignore the early Hipponax (687) as being due to the earlier Simonides, and such an error was not due to one of the masters of the school: it is probably canonographic. Xanthos' date for Archilochos in 708 is 27 x 6 years before the fall of Kroisos in 546, but Archilochos was fairly closely dated (by ancient standards) because of his synchronism with Gyges, although that king was always placed too early. The succession of Archilochos dates in Series I has the appearance of being drawn from a full-scale biography, and since 720 - 666 is 54 =27 x 2 years, it seems probable that the triple entry at 666 in Jerome represents the statement of a source that said Archilochos died, Semonides flourished, and Aristoxenos (later of Selinous) was born in this year. Solon's date in 594 is not certainly earlier than Sosikrates, who is also the authority for Periandros' death in 585 and Chilon's ephorate in 556: we do not know what date, if

any, was given to Solon by Apollodoros. Sosikrates is also quoted for a date for the birth of Thales in 639 B.C., which reappears in the Kanones; while yet another date for the same "physicist and philosopher" is 747, contemporary with the Milesian thalassocracy and with Naukratis. The last date is presumably due to an ignorant compiler; but the evidence of Sosikrates is sufficient to show that even within the Apollodoran school the relationships between the various personalities given by the founder were not all acceptable, even as conventional dates, to his successors. So too, we find Hesiod dated to 767, whereas Apollodoros placed his death in 774. Since we must assume that Sosikrates and Apollodoros both had all the relevant works of the poets and philosophers before them, we must conclude that various interpretations were possible, that is, that simple paucity of evidence was not allowed to produce a merely conventional date, but that the writers were regarded as important enough to permit the continued elaboration of historiographic views within the Apollodoran school.

From the nature of many of the dates, it is fair to infer that Apollodoros and his followers found in the writings of their subjects many cross-references as one philosopher or poet recalled or criticised another. The primary sources therefore gave a convenient professional subdivision, which had already been taken up in some cases and elaborated into spiritual "successions", wherein the generations were as clearly marked as in physical families. The chronographic discipline would continually tend towards the formation of such concepts, for it is obvious that few workers in the field had the rigorously abstract notions of the author of the western colony list.

If we examine the successions of the pre-Socratics according to Apollodoros, we seem to gain some insight into the way he handled his material. The first in the line is Thales, whose eclipse was calculable and consequently certainly ascertainable: moreover we know from Pliny (and perhaps from Demetrios of Phaleron) that the literary tradition kept the almost correct year. Anaximandros is one third of a generation younger than Thales; Anaximenes flourishes a generation later than Thales, and so two-thirds of a generation after Anaximandros; and he is one third of a short generation after Xenophanes according to Eusebius. Apollodoros is quoted as saying that Xenophanes was born in Ol.40 (620/17): the only year of this Olympiad appearing in the series is however 618, the year of Arion. The Eusebian date in 555 suggests that for Ol.M we should read Ol.NA, and so place Apollodoros' date for Xenophanes' birth in 573: this would make him 27 when the Mede appeared, and 92 in 481. If this is correct, Apollodoros' 27 in 546 will represent Xenophanes' own "25 when I began my wanderings, if that is right".

Eratosthenes identified Pythagoras the philosopher with the Olympic victor of 588 B.C.; Apollodoros (fr.339) made him contemporary with Polykrates, which perhaps places his <u>akme</u> in 533. Ignoring the differences in the lengths of generation, we then have the following successions:

generation of 585:	first third:	Thales' eclipse
	second "	Anaximandros
	third "	Xenophanes as <u>ephebos</u>
next generation:	first "	Anaximenes
	second "	Pythagoras leaves Samos

The tale is taken up by the name of Herakleitos, three generations

after Thales (585-504 = 81 =27 x 3), and contemporary with Dareios. The reported akme for Parmenides in the same year may be erroneous, for Eusebius mentions Parmenides in 457/6, and Plato makes Parmenides 65 when Sokrates was young. It is thus not imporbable that Diogenes has taken the birth year as the akme of Parmenides. Anaxagoras (in 468) is one and one third generations after Herakleitos, and Empedokles, Protagoras and Melissos a generation later still. Thus the whole series of successions is:

generation of 585.....	first third:		Thales' eclipse
	2nd	..	Anaximandros
	3rd	..	Xenophanes (ephebos)
2nd gen.	1st	,,	Anaximenes
	2nd	..	Pythagoras leaves Samos
	3rd	..	
3rd gen.	1st	..	
	2nd	..	
	3rd	..	
4th gen.	1st	..	Herakleitos, Parmenides
	2nd	..	
	3rd	..	
5th gen.	1st	..	
	2nd	..	Anaxagoras
	3rd	..	
6th gen.	1st	..	
	2nd	..	Empedokles, Protagoras, Melissos

It is thus obvious in the first place that none of these dates mean anything exact, except that for Thales' eclipse; and in the second, that they were prevented from being wildly out by the fact that the upper limit of date was so secure. It is important for the historiographic views of Apollodoros that he so definitely divided the pre-Socratics into two periods, one beginning with Thales, and the other with Herakleitos, and expressed this view by, it would seem, deciding whether to give his chronographic dates to the birth, youth, or akme of the philosophers.

In work on the poets, Apollodoros and his followers probably drew on the earlier works of Glaukos and Phanias: Phanias' "succession" Archilochos - Lesches - Terpandros appears in Series I of the scheme. The historiographic view may perhaps be most easily seen if the three columns are combined in a single list, with thirds of generations used instead of dates. Of the thirteen generations from Homer to Peisistratos, the first four and two-thirds are vacant except for Homer; from 5.3 to 7.1 there are entries of epic poets; from 8.1 to 10.1 there is the career of Archilochos; the remaining generations see the revival and extinction of epic, the rise of dithyramb, and the early melopoioi. Among all these entries, there is none that can be exactly dated, but for Archilochos' death we have a terminus post quem in 652. It is therefore not unreasonable to allow the century 650 to 550 for the four generations from Archilochos' death to the rise of Peisistratos, and by extrapolation we then have the following dates, as representing in modern conventional terminology the historiographic view of the Apollodoran school.

c875 Homer, i.e. Iliad, Odyssey, Thebais, Kypria (Stasinos or Hegesias) Phokais (Thestorides) Nostoi (Agias), the Hymns etc.
(This date is of course worthless: see below)

Arktinos
c750 Hesiod died. Arktinos: Aithiopis, Titanomachia, Ilioupersis
Hesiod, Eumelos. Kinaithon: Oidipodeia, Telegonia, Ilias Mikra
Herakleia
Antimachos of Teos: Epigonoi
c725: Eumelos: Bougonia, Europia, Hymn to Apollo of Delos
Sibylla
c700: Archilochos in Thasos
Herophile. Xanthos' place for Lesches' Ilias Mikra
c675: Semonides Undated: Kallinos
Archilochos Magnes: Amazonia (?= Homer "500 years after Troy")
c650: Alkman
Archilochos (died)
Herophile

c650: Lesches' Ilias Mikra. Peisandros' Herakleia
(the Karneia in the last model year of Eurykrates of Sparta)

c625: Terpandros. Tyrtaios and the second Messenian war

c600: Arion. Stesichoros. Alkaios. Sappho

c575: Pherekydes. Eugammon: Telegonia

Apparently the first mention of a past poet by name was Kallinos' reference to Homer; and in the next generation Lesches may have written a biographical poem on Homer's life and works. It is therefore particularly interesting to note that the named and dated cyclic and other early epic poets appear quite suddenly in a throng about 750-00, as though their names and generations were the remotest in living memory when writing was first used for historical purposes, i.e. in this case, in the time of Kallinos and Lesches. It is also in accord with the modern dating of the earliest alphabetic writing in Greece (c750-00) that the death of Hesiod should be placed in the early years of this era, for an authentic copy of his Works and Days was seen by Pausanias, and an "authentic" copy implies the belief that it was, or could have been, written down within living memory of its first publication. Consequently, in this historiographic view, Homer represents the pre-literate epic, Hesiod is just on the margin of the literate period, and Arktinos and the rest survive into the age of literacy.

The rare appearance of literacy is important in that the poet can, through writing, possess a much more definite relationship to his work than before; the narrative is his narrative, distinguishable from the general body of tradition in poetic form. Occasional poetry also becomes important as being a particular view of an occasion,

and not only a consensus of opinion and duty: so that the ascription of a particular hymn to Eumelos of Corinth working for the Messenians is in this way (as well, no doubt, as in others) different from the hymns of "Homer". Non-institutional occasional poetry does not, however, become a separate genre until about 675 (unless we define the Works and Days as such), by which time, it may be supposed, literacy was sufficiently widespread to prevent compositions which were occasional in origin from being absorbed into the general anonymous poetic tradition.

The fair inference from the Apollodoran view of early literary history seems therefore to be that the appearance of named poets around 750 is an accident of source (in this case, the new availability of writing) and that a more or less equally widespread activity must be assumed from the preceding period of pre-literate poetry, evan though the pre-literate records have not survived. How long this period was is unknown, for Apollodoros' date for Homer is of course worthless, being simply one chronographic model period earlier than Peisistratos.

4. Colonial Chronography.

We have already seen that, apart from matters of detail, the western colony list in Eusebius is as a whole three years too early, so that instead of running from <1263> to 1416, it should be placed from 1266 to 1419 a.A. To this restored series we may add three other entries:

1257	1253	Kyrene	1365	1364	Lampsakos	1391	1391	Epidamnos
1258	1255						1392	
	1256							

The majority of the remaining colonial entries fall into two

series, as follows:

1308	1308	Parion
1326	1325	Phaselis
	1326	
1362	1362	Akanthos
1363		Stageira
	1370	Olbia
	1371	
	1372	

1260	1261	Kyzikos
		Trapezous
	1267	Naukratis
	1268	
	1269	
1311	1305	Astakos
	1306	
	1332	Kalchedon (NOT 1342 as stated by Clinton)
1341	1334	Kyzikos
	1337	
1357	1358	Byzantion
	1359	
	1360	
1385	1385	Kyrene
	1386	
	1387	
1387	1386	Sinope
	1387	
	1388	

Three entries appear in years which are outside all three colony series, namely:

1360	1360	Istros	1390	1390	Myrlea	 1415	Perinthos
1361	1361			1391			

Sincethe three series are only three years apart, none of these entries would need to be emended by more than one year to place them in one of the series. But it should be argued that we have no Thucydides for the eastern colonies; and we should not assume that local tradition in the east was so much weaker than in the west that all the colony dates should fall in series years. This argument is cogent in the case of Byzantion and Istros; it is not so strong in the case of Myrlea, which is 3 years after Sinope in the Armenian; and it probably has no force at all in the case of

Perinthos, which has no preceding colonial neighbours in the text, and may easily have slipped a year under the influence of the following (too early) date for Kamarina. The particular problem of the dates of Kalchedon and Byzantion is discussed below; the chronographic scheme tabulated here does not anticipate that discussion.

				769	(Naxos)
	757	Kyzikos Trapezous	763	760	Kyrene
754			754		
	748	Naukratis	745	751	Cumae
	739		736	742	
	730		727	733	Syracuse
	721		718	724	
715				715	Mylai
	712	Astakos	709 Parion	706	Kroton
	703		700	697	(Pandosia)
	694		691 Phaselis	688	Gela
	685	Kalchedon	682	679	(Rhegion)
676	676	Kyzikos	673	670	Lokroi
	667		664	661	
	658	Byzantion	655 Akanthos Stageira	652	Lampsakos Abdera
	649		646 Olbia	643	Kasmenai
	640				
637			637		
	631	Kyrene, Sinope	628	634	
	622		619	625	(Selinous) Myrlea ? Epidamnos
	613		610	616	
	604		601 Perinthos	607	
598	[illegible]		[illegible]	598	Kamarina
	595		592	589	
	586		583	580	Akragas
	577				
	568				
	559	Herakleia Pontike (ps.Skymnos)			

It is noteworthy that just as the column headed by Naxos retains a concentration of entries for the western colonies, so the centre column is chiefly concerned with colonies from island metropoleis (Paros, Rhodes, Andros, Samos), while the Megarian colonies for which we possess dates all appear in that headed by Kyzikos. This

pattern can hardly be accidental, so that we may have some confidence in the general method of treating our canonographic source, though of course this general consideration has not absolute probative value for individual entries.

Archaeological evidence for the eastern colonial foundations is either non-existent or chronologically vague: the pottery, for example, of the Ukrainian sites has not been classified according to the classes used for the western colonies. The original excavators however believed that there was a period of trade before the major settlements were established. This is borne out, not by the eighth century colony dates (which are chronographic fictions, as we shall see), but by a number of indications of imperfect geographical and cultural information about the Pontos in eighth-century Greece. The Corinthian Eumelos (about 725) is said to have mentioned a Muse Bo rysthenis: the evidence is doubtful textually, as well as from the fact that a pseudo-Eumelos was current; but the genuineness of the reference is perhaps supported by the consideration that in Eumelos' time it would not be surprising to find a Skythian river made into a Thracian muse. Arktinos (about 750) sent Achilles to Leuke in the Danube: here again, the information is that northern Thrace is on the edge of the known world. The story of Orestes and Artemis Tauro should be associated either with the flourishing of Kyme (about 735: colony at Cumae), or with the Lesbian "thalassocracy", for both Kyme and Lesbos had kings descended from Orestes; the tale of the savage Tauroi suggests the beginning of intercourse with the Greeks (who in the myth carry off cult-treasures and women,

i.e. are pirates and slavers); and the name of Artemis Tauro may be an attempted translation of the Skyth name Artimpasa (pas being the Skyth word for cattle): Herodotus identifies the goddess with Aphrodite Ourania, which suggests a better knowledge of the nature of the cult. Finally, the Odyssey knows the Argonaut story, and uses the names Aiaia and the more northerly Kimmerioi (Kerberioi, Cheimerioi) much as we use points of the compass, to indicate the boundaries of the habitable world in the west; the decisive evidence here is negative, in that the name of Kolchis does not appear: the Urartian inscriptions seem to show that the kingdom of Kolchis was formed about 760, as a means of defence by originally autonomous tribes (the Lusa and Katarza) against the Urartian slave-raids.[2] The Kimmerioi on the other hand, with their homeland in the north Caucasus and Pontos, were beyond the Urartian reach; but if at this time they reached the coast north of Kolchis (Aiaia), there is no reason why they should not be known by repute to the Greeks.[3]

2. P.N.Ushakov: Urartian Campaigns in Transcaucasia in the ninth and eighth centuries in Vestnik Drevnei Istorii 2(1946) 31ff

3. L.A.Yelnitsky: The Kimmerioi and Kimmerian Culture in Vest. Drev. Ist. 3(1949) 14ff

The absence of the name of Kolchis in the Odyssey thus suggests that the Greeks had some knowledge of Transcaucasia before 760 B.C., and the carrying off of Medeia and the Golden Fleece shows them again as pirates and slavers. Such relations are not likely to leave much in the way of archaeological remains, so that even in the absence of archaeological evidence, the Greek traditions make it probable that in the eighth century Greek acquaintance with Thrace was considerable, and with Skythia and Transcaucasia such as might

be expected from slave raids.

The centre of Greek power in the north-east at this period seems to have been Kyme. The primary evidence is the colony at Cumae, from Kyme and Chalkis. Secondary evidence is found in the reported marriage of Midas of Phrygia to Demodike, daughter of Agamemnon of Kyme, and the "flourishing" of the Sibyl in the late eighth century. After the beginning of the seventh century Kyme (in spite of Ephoros) disappears from the traditions, and this may perhaps be due to the fact that by about 695 the Kimmerioi were in Cappadocia, so that the mines there were no longer under Assyrian or Phrygian control. This Kimmerian settlement seems to have been followed by raids on Phrygia, and Kimmerian alliances with marginal peoples, of Thracian stock in north-west Asia Minor, and Carians and Lykians in the south-west. The traditions of Kimmerian raids through Paphlagonia and Bithynia probably relate to the formative stage of the alliance, while the raids on the Hesioneis (people of Assuwa = "Asia" = Mysia) and Magnesia, and finally on Sardis itself by Dygdamis of the Kimmerioi, and the Treres and Lykioi, show the confederacy mature.

Taking the evidence altogether, we seem to find that the north Caucasian Kimmerioi have reached the Euxine coast by at latest 760 B.C.; that soon thereafter the Transcausasian confederacy of Kolchis comes into being; that about 710-05 the Kimmerioi take the leadership of this movement against the slave-raiding states of Urartu and Assyria in Transcaucasia and eastern Anatolia; by 690 is confederacy is fully formed in Cappadocia and extending westwards; by about 671 the Carians rise to "thalassocracy" and intervention in

Lydia; and the maximum of the Kimmerian power, and of the range of the confederacy, is reached about 650. The raids on Paphlagonia, Bithynia, the Hesioneis and Magnesia will perhaps be contemporary with the rise of such marginal western peoples as the Carians, and the decline of Kyme may perhaps be associated with this second aspect of a general determination on the part of the slave-raided peoples of Anatolia, Transcaucasia, and the Pontos to end the activities of their oppressors.

If we now turn to the dates given by Eusebius and other sources for the eastern colonies, the criticism (in default of archaeological evidence) must be based on historical and chronographic evidence. This is less secure than direct archaeological data, but provides a measure of probabilities.

Dates for Kyzikos.

Eusebius has the series Kalchedon 685, Kyzikos II 676 and Byzantion 658, while Herodotus reports that Kalchedon was 17 years earlier than Byzantion. We have no reason to believe that the chronographers of the eastern colonies treated local tradition more roughly than those of the west, so that it appears probable that the order of Kyzikos II and Kalchedon has been reversed by Eusebius (or his immediate source). There is textual evidence of considerable disturbance in the entries about this place from the western colony list, as well as in the variant dating of Kyzikos II to 1334, only two years after Kalchedon, in Jerome. Moreover, on the Herodotean evidence, we should place Byzantion one year higher than the series date, so that these three entries should read: ‹Kyzikos›II 685, ‹Kalchedon›676, Byzantion‹659›

Eusebius also has a foundation date for Kyzikos in 757. This is 156 = 39 x 4 years above Perinthos, if this latter foundation is given the series date 601 B.C., as argued above. Perinthos was a Samian colony, and since Samos was traditionally an ally of Corinth and enemy of Miletos, it is fair to infer that Perinthos could only have been planted in the Megaro-Milesian Propontis after the rapprochement of Corinth and Miletos in the time of Periandros and Thrasyboulos. The latest time allowable for this on our evidence at present is c586, and it is unlikely that the planting of Perinthos was long delayed: it may be dated approximately about the same time. Four generations earlier for Kyzikos I is then c686, so that Kyzikos I and Kyzikos II seem to refer to the same foundation, the variants being due to different reckonings of four generations before the treaty of Periandros and Thrasyboulos, and different datings of that rapprochement. It is moreover of some interest to note that if this argument is correct, the chronography of Kyzikos II has apparently preserved a true date. Such a preservation is quite exceptional, and may be completely accidental, for short generations are known to the chronography of Asia (cp. Herodotus on Lydia: moreover the date may prove to be wrong on non-literary evidence).

A period of Propontine activity in the early seventh century is marked by two further traditions. Strabo reports the foundation of Abydos, Priapos, and Prokonnesos in the time of Gyges from Miletos or Kyzikos. These foundations are therefore dateable between c686 and 652/44. Secondly, we have seen that the Milesian "thalassocracy" should be dated c684-71, and it would now appear that this should be associated with these Propontine colonies.

Miletos thus appears as the successor to Kymaian power in the north-east Aegean.

The Armenian dates Trapezous to the same year as Jerome's Kyzikos I: we may perhaps suppose that, like Selinous and Zankle, Trapezous here represents her mother-city Sinope, whose first foundation would thus also belong to c686. Pseudo-Skymnos gives three foundations,[4] one Argonaut, one in Kimmerian times and destroyed by the Kimmerioi, and one after Kimmerian times. The first of these three is probably a reminiscence of the slavers of the eighth century; the second, in Kimmerian times, would be well suited by the date c686, about the time when the Kimmerioi were firmly settled in Cappadocia, and were beginning their western raids. It is to be noted however that if Megara and Miletos were already active around Kyzikos and Sinope by c686, and the Kimmerioi were not yet in the west, the fall of Kyme cannot be directly related to the Kimmerian movement, unless the occupation of the central Anatolian mines was decisive.for Kymaian trade.

4. This may come from Eumelos of Corinth, who mentioned Sinope the daughter of Asopos. An anonymous tradition which makes the Argonaut founder one Autolykos, from Trikka in Thessaly, may be due to Eumelos also, for the name of Autolykos belongs to the same cycle of myths and heroic genealogies as that of Aletes of Corinth, as I shall show elsewhere.

Dates for Thasos

The two dates for Thasos in 720 and 708 are 39 and 27 years respectively above 681, which itself is 546 plus 27 x 5. The two dates thus both represent the beginning of the generation before Gyges. The nearest thing to a reliable date for Gyges' accession is c671 for the Carian thalassocracy: this forms a terminus post ante for Thasos.

The importance of Thasos was in its metals, and the metals of nearby Thrace; and this date for the colony makes it follow hard upon the passing of the Cappadócian mines out of Phrygian control. An interesting suggestion follows from this apparent sequence of cause and effect: besides the colonisation of Thasos, Xanthos of Lydia places the poet Lesches in 708, contrary to the Apollodoran tradition, which indicates a date c650-25. This Lesches seems to have been the writer of a poem on the life of Homer, from which the subsequent tradition largely grew; and among other things, the biographical tradition represented in the Herodotean Life says that Homer foretold the opening of the iron mines at Kebren in the Troad. Xanthos' dating of Lesches thus suggests that Xanthos believed Lesches was contemporary with the opening of the mines, and that this occurred at the same time as the occupation of the Thasian mines, apparently just before the fall of Kyme, for the pseudo-Herodotean Homer comes from Kyme's colony Smyrna.[5] These

5. The full influence of eighth-century Kymaian prosperity has yet to be estimated. In some ancient schools of thought Kyme stands for the flower of pre-literate Greek culture: Hesiod comes from Kyme on his own evidence, and Homer's ancestry is also traced there; Homer and Hesiod meet in Kyme's ally Chalkis. The interest of Chalkis in metals is well evidenced in ancient literature.

indications place the decline of Kyme fairly narrowly c696-86.

Herodotus says that before the Parian settlement, Thasos was mined by the Phoenicians, meaning thereby not the Syrians, but the Minsmen of Kadmos. The Aegean Phoenicians are at home in Caria, Miletos, the islands, and the coastal areas of the east mainland - Boiotia, Thessaly, Euboia, and Attika, and there are faint traces of them at Corinth in the cult of Athena Phoinike. Who they were is as yet uncertain; but by 700 we must suppose that

those in Miletos, Euboia, and the mainland were as Greek as the rest of the inhabitants. Whether this is also true of the Thasians is of course unknown.

The sequence of Megarian and Milesian settlements

Eusebius has Astakos in 712, Kalchedon in 676 , Byzantion in 659. Pseudo-Skymnos adds Selymbria before Byzantion, and Herakleia Pontike in 559; Charon makes Astakos later than Kalchedon; and Lydus dates Byzantion 628/5. These variant figures are by no means readily amenable to analysis, but the following suggestion may be ventured.

Byzantion in 659 is 100 years before Kyros, so that Kalchedon 17 years earlier is 39 x 3 before Kyros: reduced to 25-year generations, this reckoning gives c634 for Kalchedon, and c617 for Byzantion. Istros according to Eusebius is up to four years later than Byzantion, and according to pseudo-Skymnos Istros and Tomoi are founded when the Skyths invade Asia. With Byzantion in c617, we may take the true date of the Skyth invasion of 613 for the foundation date of Istros and Tomoi.

But there was a very different dating of the Skyth invasion, which appears already in Herodotus: 28 years before the fall of Nineveh. The true date of the fall of Nineveh was 612, and this was known to the later writers; it is 27 years before their dating of Thales' eclipse and the end of the Medo-Lydian war. In spite of the 27 years however (which might have been expected to guarantee the correct transmission) Eusebius presents us with the following dates for this sequence of events:

Arm.	Jer.	Event
1384	1381	The Skyths
	1382	invade
	1383	Palestine

Arm.	Jer.	Event
1397	1395	Fall of
	1397	Nineveh
	1399	to the
1408	1408	Medes
	1409	

Arm.	Jer.	Event
1433	1427	Thales'
	1429	eclipse
	1430	
	1432	(585 B.C.)

Arm.	Jer.	Event
1440	1433	The
1441	1435	Medo-
	1436	Lydian
	1440	War
	1441	

The dates which give the Herodotean sequence are 1381 for the Skyths, 1409 (28 years later) for the fall of Nineveh, and 1436 (27 years later) for the Medo-Lydian War, that is, B.C. 636, 608, and 581 respectively. The year 608 may explain the shift away from the true dating, if it represents the year of the end of the Assyrian monarchy, that is, if it represents a most knowledgeable and careful source drawing on Babylonian archives, and believed to be superior to the Herodotean synchronism of Thales' eclipse and the end of the Medo-Lydian war. If this synchronism had, on the contrary, been maintained, we should have expected to find a date for the Skyths 55 years before the eclipse, in 640 B.C.: what we find instead is a variant date for Thales' birth. This suggests very strongly that the Skyth invasion and Thales' birth were for some reason associated, and we note that the Skythic event is the invasion of Palestine, and that Thales was a "Phoenician": it would seem that the invasion has been used to explain the birth of a "Phoenician" in Miletos by a story of Syrian refugees. The advocates of "Moschical or Mosaical learning" would find such an explanation of the origins of physics much to their taste. The

early Eusebian date for the fall of Nineveh may perhaps be explained on this basis, as being developed by those who accepted Apollodoros' date in 624 for the birth of Thales, and held that he should be associated with the Skyth-Nineveh-eclipse sequence, though not its Herodotean dating: Diodoros (=Ktesias?) speaks of a three-year siege of Nineveh, and Bactrians (=Skyths) joining first one side then the other. With Thales' birth in 624, the Skyths in this version would invade Asia in 625, and Nineveh would fall three years later in 622, Eusebius' early date.

The date of 628/5 for Byzantion seems to belong to this sequence, for if Istros and Tomoi belong to the Skyth year reckoned as 625, Byzantion could then be in the fourth year before. Finally, the late Eusebian dates for the Medo-Lydian war may perhaps be explained by the supposition that the year 1436 was taken, in error, as marking the beginning, instead of the end of the war. We may therefore perhaps conclude that these colony dates of Eusebius, pseudo-Skymnos and Lydus go back to a common historiography variously interpreted and elaborated, of which the basis is:

Kalchedon three generations before Kyros (c634)
Byzantion 17 years later (c617)
Istros and Tomoi 4 years (or in the 4th year) later = the Skyth year. (613)

The Eusebian Astakos in 712 is 45 years after Kyzikos I, which we have already reduced to c686. Charon said that Astakos was later that Kalchedon, which Eusebius' source probably made 9 years after Kyzikos II. Thus Astakos is one and one-third generations after Kalchedon in c634, or about 600.

The Milesian colonies Olbia and Sinope II are 12 and 27 Eusebian years after Byzantion: on reduced dating these would give

Olbia c606 and Sinope c592. Pseudo-Skymnos dates Olbia in the time of the Median empire, and Sinope "after the Kimmerioi". These vague indications of date would suit the years suggested, as well as the tradition of a long Kimmerian occupation of Sinope, which on our reckoning would begin soon after c686 and end soon before c592.

Eusebius dates Lampsakos (from Phokaia) and Abdera (from Klazomenai) six years after Byzantion, and Myrlea (from Kolophon) another 27 years later: this gives c611 for the first two colonies and c586 for Myrlea, which is then contemporary with Perinthos. The remaining Eusebian entries are the two Andrian colonies in 655, two generations before Perinthos, and two after Parion. With Perinthos c586, the Andrians come at c636, and Parion c686, soon after Parian Thasos. Finally, Phaselis is to be placed three conventional years before Gela of the western colony list, that is c677.

These suggestions for absolute datings are tabulated below. The relative order of the foundations is of course different from the Eusebian tradition in the earliest entries: Thasos now appears as the earliest dated colony. But in one most important respect the relative dating is unchanged, and that is the almost complete saturation of the Thracian coasts in Europe, Asia and the Pontos, before colonies are planted in Skythia and Transcaucasia (except for the early attempt at Sinope). It is also to be noted that, on this dating, by c563 the Greek settlements reach as far east only as Amisos in the south and Olbia in the north, and the whole eastern Pontos is so far unsettled; this implies that the colonisation of the Caucasus belongs to Achaemenid times.

(c735: the prosperity of Kyme: Cumae; Demodike and Midas; Sibylla
Eumelos' Sinope and Borysthenis;
Arktinos' Achilles in Leuke
Artemis Tauro of Skythia
Kolchis in the Argonaut story
Homer and Hesiod from Kyme and in Chalkis

c696: the Parians colonise "Phoenician" Thasos.
the story of Homer and the iron
mines of Kebren

c686: Megara founds Kyzikos (I and II) in the Propontis
Miletos founds Sinope I in the approaches to Transcaucasia:
it is destroyed by the Kimmerioi.
(Miletos and Megara succeed the
Kymaian power in the north-east:
perhaps the Kolophonian capture of
Smyrna belongs here)

c684-71: The Milesian "thalassocracy": "Naukratis" represents
Egyptian trade, and Ionian and
Carian mercenaries.

c677: Rhodes founds Phaselis in eastern Lykia

c671-34: The Carian "thalassocracy"

c671-52: Miletos and Kyzikos at Abydos, Priapos, and Prokonessos

c636: Andros founds Akanthos and Stageira in eastern Chalkidike

c634-575: The Lesbian "thalassocracy"

c634: Megara founds Kalchedon in the Propontis, where if an Atthis
phyle dates from the foundation,
Athenians were also in the colony

? Megara founds Selymbria in the Propontis

c617 Megara founds Byzantion in the Propontis

c613 Miletos founds Istros and Tomoi in Pontine Thrace

c611 Phokaia founds Lampsakos on the Hellespont, Klazomenai
founds Abdera in Thrace.

c609 Miletos and Phokaia (with Rhodes?) found Apollonia Pontike
among the Mariandynoi (Asiatic Thrace)
cp. the early date for the Phokaian
thalassocracy c600 in Jerome

c605 Miletos founds Olbia in SKYTHIA (Generation of Skargapeithes)

c600 Megara founds Astakos in the Propontis

c590 Miletos founds Sinope II on the approaches to TRANSCAUCASIA

c586 Kolophon founds Myrlea in the Propontis) (end of the Skyth "empire"
SAMOS founds Perinthos in the Propontis)
Rapprochement between Miletos & Corinth

c575-32: The Phokaian "thalassocracy"

c563 Miletos and Phokaia found Amisos in TRANSCAUCASIA

c559 Megara and Boiotia found Herakleia Pontike in Pontine Thrace.

With these dates, eastern colonial history seems to have six main periods. The first is that of the prosperity of Kyme, which has the air in later tradition of being semi-mythical, not in its dating (which is little inflated), but in its associates - the

mysterious Sibylla, Midas with his magic touch, Orestes and Artemis Tauro, and so forth. The second period begins quite suddenly with the boyhood of Archilochos and the disasters of Thracian and Kimmerian raids. It would appear probable that the conditions of life in the eighth century were very different from those in the seventh, so that continuity appeared to be broken; it may even be that there had been little change in this area since the time of the "Pelasgian thalassocracy" (c975), and that a rather belated culture slowly matured in Aiolis and Ionia, especially in pre-literate epic. In that case, the disasters of the early seventh century would be a particularly rude awakening, and the change would be of the kind suggested by the nature of the traditions. The contrast with the mainland development in the eighth century is considerable, and this probably accounts for the attempts to raise the early colony dates by using the 39-year generation, in order to assert eastern equality with the western Greeks. The same chronographic technique is employed in the thalassocracy list; and this may be taken to infer that the thalassocracy list and the long chronography of the eastern colonies belonged to the same school, i.e. Kastor of Rhodes. The short chronography seems to be the source of pseudo-Skymnos, a follower of Eratosthenes, so that it perhaps belongs to the Hellenistic rather than the Greco-Roman school of chronography and historiography.

The 110 years from c696 to c586 may be divided into the periods c696-52, the Kimmerian period; c652-34: the period of Kimmerian decline and Greek recuperation; c634-05: the Lesbian thalassocracy and the exploitation of the Thraces (together, perhaps, with the story of the head of Orpheus in Lesbos); and c605-586, the beginning

of colonies in Skythia and Transcaucasia. About 586, the rapprochement of Periandros and Thrasyboulos initiates an entirely new period.[86]

6. We should not leave these colonial dates without noting the chronography of the Herodotean Life of Homer:

From Troy to Lesbos:	130 years	= 39 x 3⅓
thence to Kyme	20 ..	
thence to Smyrna		= 39 x 1 minus 1
and Homer's birth:	18 ..	
thence to Xerxes	622 ..	
	790	

Thus Troy is placed 780 years (=39 x 20) before Marathon, the base-date of the western colony list; and Homer's birth is 351 (=39 x 9 = 27 x 13) years before Kyme's colony Cumae in 751. The chronography is early in appearance, and apparently belongs to the author of the western colony list, or a disciple. The first three and a third generations imply the genealogy Orestes-Penthilos-Archelaos-Gras, and a date for the Return in 1140 (or 1143, to agree with the Chronographic Model). Eusebius' date of 130 years after Troy for Cumae looks like a degenerate derivative of this scheme.

5. Religious Chronography

There is a group of archaic dates in Eusebius, all referring to developments in Greek religious practice, which may be arragged in series as follows:

(884 B.C. Apollodoros' elder Lykourgos)

1240 1241 Olympiad 1.1

1351 1346 Gymnopaidia
1348
1349

1380 1376 Consultation
1377 of the oracle
1378 at Dodona

1439 Pythian Games

1443 1441 Nemean
1444 Games
1445
1448

1448 1446 Abaris
1448 comes
1449 from
1450 Skythia

1466 1463 Kroisos
1464 consults
1466 Delphi

Second series:

(761: Apollodoros' date for the younger Lykourgos)

1436 1435 Isthmian Games
1436 (581)

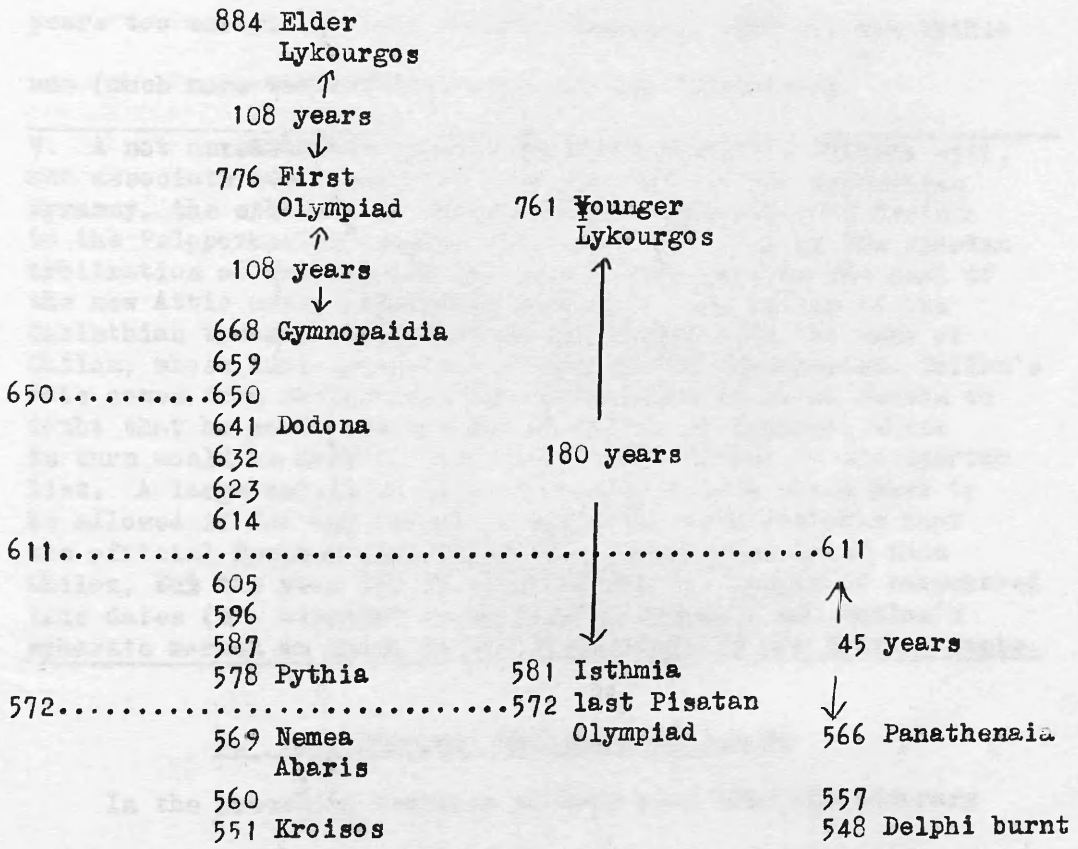
(572: last Pisatan Olympiad)

Third series

1451 1450 Panathenaia
1451

1469 1465 Temple of Delphi
1468 burnt.

This is a small and fragmentary scheme in comparison with the Literary and Colonial chronographies, but equally belongs to national rather than local history:



The relative dating of Kroisos' consultation of Delphi and the fall of Sardis (551-46) is the same as in Herodotus. The outstanding religious date which does not appear in this scheme is 676 for the Karneia at Sparta: this is quoted from Sosibios, but may go back to Hellanikos, and is incorporated, as we have seen, in the Literary Chronography. The year 676 is the last model year of Eurykrates

of Sparta, and so the date of the Karneia ought perhaps to be reduced to c626; the Gymnopaidia in 668 is the year after Hysiai in 669: a different historiography - after the conquest of Thyreatis - would suggest a date c545. The first Olympiad, properly speaking, is not a date for an event, but simply the first numbered year in a certain convantional reckoning. The remaining four festivals in about the second quarter of the sixth century are probably in the right generation, though some years too early. We have already suggested c558 for the Pythia and (much more tentatively) c554 for the Panathenaia.[7]

7. A not unreasonable hypothesis would place the Isthmia c556, and associate its foundation with the fall of the Corinthian tyranny, the ephorate of Chilon, and the adherence of Corinth to the Peloponnesian League, to be followed c553 by the Spartan arbitration of Salamis and the Panathenaia c554 as the seal of the new Attic unity (including Salamis). The ending of the Corinthian tyranny would then be associated with the name of Chilon, whose anti-tyrannical policy is well-documented. Chilon's date comes from Sosikrates; but there seems to be no reason to doubt that he would use the ephor-list of Timaios, which in turn would be more or less accurately related to the Spartan list. A large margin of error in Chilon's date would have to be allowed if for any reason it could be shown probable that the official Spartan list began some generations later than Chilon, but the year 556 is about within the margin of remembered true dates (cf. Hippias' birth year in Athens), and Chilon's ephorate marked an epoch in the development of the Spartan state.

B. Eratosthenes' Mathematical Scheme

In the preceding sections we have seen that the Literary Chronography is based on a 39-year series in the biography of Thales, containing the years 624, 585, and 546. The diagram of the Religious Chronography above shows that the 39-year series in that scheme, contains the years 611, 572....., that is, years which are always 13 years (one-third of a generation) later than the years of Thales. The diagram of the Colonial Chronography

further shows that the 39-year series there contains the years 598, 559....., which are 13 years later again. That is to say, the three chronographies together makes one complete system, with the following relationships:

in the line of Thales
the first thirds of generations are bases for three 27-year series in the Literary Chronography
the second thirds of generations are bases for three 27-year series in the Religious Chronography
the third thirds of generations are bases for three 27-year series in the Colonial Chronography.

This series of relationships may be set out in tabular form:

Generations and thirds in the 39-year Thales line.	Literary Chronography (three 27-year lines)	Religious Chronography (three 27-year lines)	Colonial Chronography (three 27-year lines)
624	624		
611		611	
598			598
585	585		
572		572	
559			559
546	546		
533		533	
520			520
507	510 504 507	506 509 503	502 505 508
494	501 495 498	497 500 494	493 496 499
	492 486 489	488 491 485	484 487 490
481	483 477 480	479 482 476	475 478 481

The last four lines are added exempli gratia to show the main result of the system, namely, that all years are made chronographically available. In the Chronographic Model, or any similar construct, where a single base-date was used, not more than 9 plus 13 years

in every 117 were chronographically available. Other years could only become available by changing the base-dates, and then the problem arose of the commensurability of the different systems. For instance, the Spartan line in the Chronographic Model comes down to 480 B.C., the line of the western colony list to 490, and the line of Athenian archons to 514. These cannot be related to each other in terms of 39 and 27 year generations. The construct above, which must surely be the work of the mathematician Eratosthenes, immediately removed all such difficulties, and at the same time allowed the complete preservation of all previous reckonings believed to be historiographically sound, such as the western colony list.

The whole construct is therefore a matter of plotting points in time, analogous to Eratosthenes' plotting of points in space in his geographical work. By his deft and economical craftsmanship Eratosthenes made mathematically possible the writing of pan-Hellenic history, a task which, we may suppose, he judged important for the maintenance of Greek cultural independence in the face of ancient literate barbarian cultures.

VIII: Chronography of the Asiatic Dynasties

(a) The empire of Upper Asia

Just as the Greek chronographers made no distinction between their own archaic and mythic types of generations, so also they included in their work the generations of certain Asiatic dynasties, from the time of Herodotus onwards. Herodotus, as we have seen, translated certain Babylonian traditions of Asiatic history into a chronographic scheme, making, for instance, the 195 years from Esarhaddon to Xerxes equivalent to five 39-year generations.

i. the epochs of Herodotean tradition

The chief points of dating which Herodotus took from his Babylonian source were the ending of Kassite power about 1228 B.C., and the ending of imperial Assyria with the revolts in the time of Sargon II, especially the Mannian revolt under Deiokes. He dated the two queens Sammuramat and Naki'a accurately by generations, but made them both Babylonian, not Assyrian. His story of the Skythian empire seems to arise from the conditions of 613-586 B.C.

ii. Ktesias

A rival and intentionally different account of the empire of upper Asia is contained in the excerpts surviving from the work of Ktesias, written about the first decade of the fourth century. Ktesias claimed to have used official Persian archives for his work, and while the archives, as represented in his narratives, are hardly state documents, still the Persian colouring is very marked.

α. on Media

Like Herodotus, Ktesias sees Assyria, Media, and Persia as the successive imperial powers in upper Asia. Instead of the four Mannian and Median kings of Herodotus however, he lists nine Median kings, of whom only the last, Aspandas, is identified with a Herodotean name, that of Astyages. The two preceding kings are nevertheless given the same regnal years as Phraortes and Kyaxares in Herodotus, while the 22 plus 31 years of the Herodotean Deiokes are represented by the 22 plus 40 years of two Ktesian kings. It appears therefore that for the last five of his Medes, Ktesias merely gives a conscious variant of the Herodotean tradition; it is only in the earlier history of "Media" that he draws on independent sources.

1) dating: The regnal years of the first eight Ktesian kings are given by Diodoros: the regnal years of Aspandas-Astyages are missing. It is possible however that the total for the nine may be preserved by the Eusebian Chronographia, which after detailing a Median dynasty with a total of 256 years, remarks that the Median empire lasted 298 years. The immediately preceding Assyrian list is that of 1240 years, and at the end Eusebius remarks that the Assyrians lasted 1300 years, or 1240 years. The total of 1300 for Assyria is Diodoros' representation of the Ktesian figure for Assyria, so that Eusebius Median 298 years may come from Ktesias too. Since the first eight kings are given 282 years by Diodoros, this would give Aspandas-Astyages 16 regnal years.

Since Ktesias has a longer Median empire than any of our other sources, it is reasonable to suppose that the earliest

date for its foundation surviving in the literature is also his. This is the year 843 B.C., and the 298th year thereafter is 546 B.C. This very late date for the fall of Astyages is not impossibly late: the Delphic and Herodotean dating of the fall of Kroisos five years after Astyages would make Sardis fall, on this reckoning, in 541, and this is probably the year given for that event by the Marmor Parium. Moreover, 541 for the fall of Sardis is the kind of date Ktesias might be expected to use in opposition to Herodotus, for the Herodotean 553 (1st Lydian year of Kyros) is 514 plus 39 x 1, while 541 is 514 plus 27 x 1. On this argument, the Ktesian list of Median kings would read:

843-	Arbakes	28	
815-	Mandakes	50	108 = 27 x 4
765-	Sosarmos	30	
735-	Artykas	50	
685-	Arbianes	22	72 = 27 x 2 2/3
663-	Artaios	40	
623-	Artynes	22	
601-	Astibaras	40	118 = 27 x 4⅓ plus 1
561-	Aspandas-	16	
546	Astyages		
		Total:	298 = 27 x 11 plus 1

We may note the use of thirds of generations.

2) historiography (a) the last three kings

As already noted, the last three Ktesian kings correspond to to the Herodotean Phraortes, Kyaxares and Astyages. They differ in their names, and in the numbers assigned to the last (Herodotus has 35 years for Astyages). The struggle between Kyaxares and the Skyths appears in Ktesias as a struggle for many years between Astibaras and the Sakai and the Parthians, peoples from the east of the Caspian; while the capture of Nineveh assigned by Herodotus to Kyaxares, is retrodated by Ktesias to the time of Arbakes: the

purpose of this will be discussed below.

(b) Artaios

Artaios is a homonym of the Artaioi, who appear elsewhere in Greek accounts of Persian origins. Herodotus makes the Persians at first Kephenes, then Artaioi, and thirdly Persians: they took their first name from Kepheus son of Belos, and their third from Perses son of Perseus. Hellanikos (F59Jac) says that Perses gave his name to those formerly called Kephenes and Chaldaioi: on the death of Kepheus he marched out from Babylon and settled in Artaia: the Babylonians left behind called themselves Chaldaioi. He adds (F60Jac) that the Artaioi are inhabitants of Artaia, and the heroic ancestors of the Persians. In these statements, the Kephenes, a Levantine people in the Perseus myth, are associated with the desert tribes of the Chaldaioi, and in Strabo the Kephenes are linked with the Eremboi (the Aramaioi of the Syrian desert) and with the Pygmaioi (the peoples beyond the southern desert). Thus the tendency is to place the Persian ancestors too far south, just as Medos of the Medes, the son of Medeia of Kolchis, is apparently of too far northern a derivation.

Ktesias is consistent with himself in naming his first Persian in the time of Artaios. This is Parsondes, who founded a dynasty among the Kadousioi, a people on the southern part of the western shore of the Caspian. Artaios and Parsondes, in Ktesias' reckoning, belong four generations before Kyros; and according to Dareios' own account of his ancestors, this is also the generation of Achaimenes. According to Herodotus, Achaimenes is a phratric eponym, so that this generation should represent a definitive stage in the formation

or development of the phratry. But the Herodotean Achaimenes is three generations earlier still, and in these three generations are a Kyros and a Kambyses, names characteristic of the senior Achaimenidai. If we assume roughly a century to four generations, these various generation counts appear as follows:

735	Achaimenes			
710	Teispes I			
685	Kambyses I			
660	Kyros I		Achaimenes (II)	Artaios: Parsondes
635	Teispes II		Teispes II	Artynes
610	Ariaramnes	Kyros II	Ariaramnes	Astibaras
585	Arsames	Kambyses II	Arsames	Aspandas-Astyages
560	Hystaspes	Kyros III	Hystaspes	
	Dareios I	Kambyses III	Dareios I	

Among the few facts recorded by the Persians about their own history is the information that Kyros II and his father Teispes II were kings of Anšan around Susa. On the above dates, Teispes acquired this kingdom sometime in the second half of the seventh century: there is some evidence from Jeremiah and Ezekiel that Anšan had devoured Elam between 597 and 588. Before this, the contemporary records are those of the Assyrians, who from 836 to 691 speak of a territory of Parsuaš, but this is nowhere near Susa: it is south of Lake Urmia (Matienos), south west of the Caspian, and not far from the Kadousioi of Parsondes. This territory was open to attack from both Assyria and Urartu: in 827 it was invaded by Shalmaneser III, about 800 it was attacked by Ispuinis of Urartu, and conquered by Argistis I in the years 781-74. It was regained and devastated by Tiglath Pileser III in 736. In 714 (after the revolt of Daiakku) it is still Assyrian; in 691 it rebelled, together with the Chaldaioi, Anšan, and other eastern lands.

A comparison of the historical and traditional data suggests that the Herodotean Achaimenes of the second half of the eighth century represents the reorganisation of a phratry of Parsuas after the devastation of 736 B.C. The rebellion of 691 then marks the recovery of Parsuas from the devastation: but the revolt failed. About the middle of the seventh century, Parsondes is reported among the Kadousioi; Artaios of Artaia appears; the second Achaimenes suggests a further development of the phratry; and in the next generation the Persian kings of Anšan begin. Taken together, these traditions suggest that the old Parsuas disintegrated after 691, and its nobility at least sought for new principalities further east, such as Parsondes among the Kadousioi. Hellanikos' story of the march of Perses to Artaia also belongs, perhaps, to this context: and Perses was reputed by some of the Greeks to be the father of Achaimenes. Thus, interpreted as the father of the second Achaimenes, this Perses represents a generation in the first half of the seventh century which moved from the old disintegrated Parsuas to Artaia, which should perhaps be sought around Artake, in south-eastern Media (in spite of the tempting identification of the Artaioi with the Persian ancestors of Mazdayasnian cult). The second Achaimenes will then represent the first settled generation of the phratry in its new home.

When we take together the fact that this second Achaimenes comes to us from Persian, not Greek, sources, and that the Artaioi were reportedly reckoned by the Persians as the heroic ancestors, we are brought to the conclusion that the pre-Persian Artaioi were absorbed into the Persians, so that some of the later Persians looked back to the Artaioi as their ancestors. The appearance of

the phratric eponym Achaimenes in this context moreover suggests that the absorption took place by means of an organisational fusion, so that the Artaioi were distributed among the Persian phratries: the Achaimenidai thenceforth included descendants of Artaioi. Such a fusion would explain also the genealogical variants: the second Achaimenes, ancestor of Dareios, representing the absorbed Artaioi, and Dareios himself not claiming an older inheritance: while in the fifth century Herodotus asserts that the descendants of Dareios claim the full patent of Persian nobility, blood-descent from the phratry of old Parsua.

In this context, Hellanikos' story of the Chaldaioi is also susceptible of interpretation. The movement from old Parsua was also a movement from the frontier of the Urartians, the children of Ḫaldis, and it would certainly be this name, and not that of the southern Chaldaioi, which Persian ancestral tradition remembered, as in the role of Kai Khosrau. Moreover, Teispes, the son of Achaimenes, is almost a homonym of the Urartian divinity Teisbas, (Chishpish) himself the old Hurrite weather-god Teš̆ub in a new spelling. But the Greeks naturally would take the Ḫaldian name to mean the Chaldaioi whom they knew, so that the ancestors of the Persians were brought into association with the desert tribes, and in Herodotus Kepheus is the son of Belos. There seems to be as yet no non-Greek evidence for the identity of Kepheus and the Kephenes, so that, apart from supposing they were imagined as Levantine (though not exclusively so: there was a heroic Kepheus in Arcadia), their supposed association with the Persians is only to be explained as arising from their appearance in the Perseus story.

(c) Arbianes and the first four kings

The Arbianes of Ktesias has the 22 years attributed to the judgeship of Deiokes by Herddotus, and was therefore intended to represent the same period. The revolt of Daiakku was instigated or assisted by Rusas I of Urartu, who had apparently been prince of Arbu before he became king. This principality seems to account for the name of Arbianes in Ktesias, and if so, the list of "Medes" becomes at this point entangled with the Urartian history of Hellanikos' "Chaldaioi".

Diodoros gives the Ktesian order of the first four kings as shown above, but the later chronographers' lists, derived from Ktesias, invert the order of the second and third names, so Diodoros may be wrong. The names are not impossibly far removed from some Urartian names, and the identification is supported by the appearance of the successor Arbianes. They are

1. Arbakes
2 or 3. Maudakes, Mandakes, Mamythos : Menuas c805
3 or 2. Sosarmos (also in the Assyrian list as Sosmares) : Sarduris I 840, II 760
4. Artykas or Kardykeus : Argistis I 785

If we take the chronographers' and not the Diodoran order of names, Sosarmos will represent Sarduris I c840, and Arbakes will be his predecessor Arame, who in 859 and 855 was defeated by Shalmaneser III: these defeats did not prevent the establishment of the Urartian kingdom. Urartian culture and homogeneity were already sufficiently developed by the time of Assur-nasir-pal II (884-859) to adopt writing from Assyria, and Urartian political influence was perhaps even then strong enough to support and instigate rebellions against Assyria in the frontier provinces.

Arame however may represent a new stage in the formation of the Urartian state, and in carrying through this development despite the Assyrians established not only his kingdom but perhaps also a reputation for himself among the northern peoples which grew until in Ktesias he defeats and ends Assyrian imperialism for ever. We may perhaps compare the growth of Daiakku's reputation, who is the Herodotean candidate for the ending of Assyrian imperialism.

3) Development of Greek traditions of Persian origins

The Ktesian list of "Median" kings thus appears to begin with five generations of Urartian sons of Ḫaldis; continue with a Persian ancestor; and only with the last three kings and their traditions is comparable with the Herodotean Medes. The implication is that the Persians and Medes alike were in the ninth century indistinguishable parts of the Transcaucasian cultural continuum. Ktesias is by no means alone in this historiographic view. His association of the Urartians and Persians is supported by Hellanikos' stories connecting the Persians and the "Chaldaioi"; the same assertion is made in a still more mythical form by Herodotus when he says that Kepheus was the son of Belos. As for the Medes, whom Herodotus confounds with the Mannai (their constant allies and fellow-rebels), Ktesias represents them as being, as it were, the most recent form of the older Urartians, just as the Persians are the most recent form of the Artaioi. So strong, persistent, and variously formulated a tradition must be supposed to have some meaning, and the interpretation is obvious once the problem is stated: Transcaucasian

organisational experience, and not Assyrian, was the basis of the Median and Persian empires. Whether this tradition accurately represents the historical process is of course another matter: there seems to be no doubt that the opinion was held by the Persians themselves.

Hellanikos already takes for granted the ancestral link between Perseus and the Persians. Perseus was the "founder" of Tarsos, and this Danaan settlement in Kilikia survived until the second half of the eighth century, and probably later: the first affiliation of the Persians to Perseus probably occurred among those Greeks to whom Perseus was of considerable importance, but can hardly be earlier than the sixth century. If the inference is correct (from Ezekiel xxvii, 10; xxxviii, 5) that there were Persian troops in Tyre at the beginning of the sixth century, far east Greek acquaintance with the Persians may have begun then, and this Phoenician rencontre may have been the basis for the story that Perses' mother and grandfather came from Syria, rather than from Kilikia, where we might have expected the Greeks to place them. Hellanikos also already contains the association of the Persians and "Chaldaioi" which will have come to him directly or otherwise from Persian sources, together with his information about Artaia; we must remember that the Medes (and therefore also some Persians in Median service) were in touch with the Kilikian and Cypriote Greeks long before the conquest of Lydia, so that Persian and Median traditions of origin had plenty of time to be reformulated in Greek terms. It is particularly interesting to note that the story of Perses' succession to his mother's father's

kingdom is a model of anchisteia law, supposed to be in operation among Herakleid ancestors; and in the first half of the sixth century the Lykourgan reforms at Sparta established a new anchisteia form among the most famous descendants of Herakles. It was now or later, also, that the story of the Partheniai of Taras arose from the new differences of organisation between Sparta and her colony; and comprised a story of the origin of the half-breeds which is first found associated with the end of the "Skyth empire" in c586.

Herodotus has only the most elaborated and generalised trace of the tradition of original unity of the Persians and Chaldaioi in his report that Kepheus was the son of Belos: but he also is the reporter of the generation of the first Achaimenes, which takes the Persian royal pedigree back to the time of old Parsua. In place of the general historiography of Hellanikos, the Herodotean interest is much more particularised: he attempts to treat the Medes and Persians as individual and distinct nationalities, unconfused with their associates, or with each other. He does not succeed in disentagling the Medes and the Mannai, but he associates none of these three peoples with Urartu.

Ktesias is the protagonist of the opposite historiographic view, subsuming Urartians, Medes and Persians under a common head until the end of the eighth century, and thereafter permitting Persians and Medes to emerge. It is noteworthy that in consequence he stands much nearer to Hellanikos than does Herodotus.

The unknown authority for the statement that Achaimenes

was the son of Perses may have been Hellanikos, with whose view of Persian history the statement would well agree. This affiliation, taken together with the fact that the second Achaimenes is a Persian concept, suggests that Dareios was (if the terms may be used) a biological Artaian and an organisational Persian; by Herodotus' time, it would seem, the distinction had ceased to exist. Even for Hellanikos, the Artaian name of a past organisational form had come to be used for the Persian heroes of old. It is a further question whether Dareios the Artaian was not transmuted, in non-Greek tradition, into Dareios the Mede.

4) Greek historiography of the north-eastern peoples in general

The three fifth-century sources thus supplement one another in filling out a fairly consistent picture of current beliefs about the origins and sources of experience of the Medes and Persians. In Herodotus, Achaimenes the phrater and Kepheus as the "son of Belos" go back to the eighth century situation of the Persians; Deiokes of "Media" describes the revolts which begin the process of Assyrian decline from the end of the eighth century. Immediately after this there is a ill-disguised lacuna. In Hellanikos, the early period is represented by Perses and the "Chaldaioi"; the Herodotean lacuna is partly filled by the sojourn in Artaia; and - if Achaimenes the son of Perses belongs to Hellanikos - the fusion of Persians and Artaioi also belongs to the lacuna. The beginning of Assyrian decline is dated a little later than by Herodotus, for Sardanapalos the conqueror of Tarsos and Anchiale represents the activities of Senacherib about 696. Ktesias adds the earlier history in some detail, and has Artaios and Parsondes in the lacuna.

This lacuna in the first half of the seventh century represents the historical period when the Kimmerioi and the Skyths first appear in the contemporary documents: it may be supposed therefore that Greek views of these two intruders affected their views of the more anciently established north-eastern peoples. The Kimmerioi are first mentioned in the last years of Sargon II: in 707 they are at war with Urartu, and in 705, it appears, Sargon met and was killed by them in Tabalia. between Cappadocian Komana and Malatia. In 695, the Assyrians lost Tilgarimmu in Tabalia, probably to the Kimmerioi. In 679, Esarhaddon reports that Teuš̌pa was king of the Kimmerioi and Dahai in Tabalia and Kilikia on the Halys. About 652, Tugdamme of the Umman Manda killed Gyges in Lydia: Gyges' enemies are called Kimmerioi, Treres, and Lykioi by the Greeks. Some few years after this, Sandrahš̌atra of the Kimmerioi of Kilikia on the Halys was defeated by the Assyrians. The Skyths are first mentioned in the time of Esarhaddon: Iš̌paka allied with Mannai, Media, the Kimmerioi and Sapardai; but Bartatua (Protothyes) apparently allied with Assyria. His son Madys is reported by Herodotus as the leader of the northerners in 613; Strabo says that Madys the Kimmerian defeated some Treres (perhaps allied to the Lykioi) in Asia Minor. About 613 some northerners called Skyths by Herodotus and Sakai and Parthians by Ktesias were allied to Assyria, but in 612 they joined the Umman Manda in the attack on Nineveh. The name of the Umman Manda recurs as the Babylonian name for the forces of Iš̌tumegu, Astyages the Mede.

The first noteworthy feature of these contemporary records is the relatively static habitat of the Kimmerioi: from 705 to

to about 640 they live in Tabalia and Kilikia on the Halys, fight the eastern powers and raid the western. This static habitat, with its implications for knowledge of and work in the country is entirely contrary to the Herodotean view; but that in turn disagrees with a very prevalent tradition which records Kimmerian wars in western Asia just before the founding of the Pelasgian thalassocracy, and again in 782 B.C.; and they are said to have "often" occupied the southern shores of the Euxine, and raided into Paphlagonia and Phrygia. These early Kimmerioi are often associated with the Amazons of Themiskyra and the Thermodon Valley near Kimmerian Sinope; and even in Herodotus the Amazons and the peoples of the northern and north-eastern Pontos are associated in the legend of Sarmatian ethnogenesis. Since it was a Greek habit in historical times to apply the Amazonian name to any barbarous and matrilinear people whom they met, it is not necessary to believe that these Kimmerian Amazons were fictions; they will be a people of northern Asia Minor with these characteristics. Similarly, these early Kimmerioi will represent some northern people believed to belong to the area of the Hallstatt-Caucasus cultural continuum, and we have previously suggested that they are the traditional representatives of the carriers of buchelkeramik to Troy VIIB. The "Kimmerioi" of the tenth to early eighth centuries will then be the same peoples as the Thracians in Asia, and the Herodotean historiography differs from the vulgate in distinguishing the Thracian and Caucasian elements among the various northern immigrants. Herodotus also attempts to distinguish clearly between the Kimmerioi and the Skyths - a distinction by no means clear even in the contemporary

records: and the basis of his distinction seems to be the notion that the Kimmerioi "really" belong west of the Caspian and the Skyths east of it, so that the presence of Skyths in the west is due to migration. It is likely that some few clans and families in the Ukraine in the fifth century came from the far east, and remembered their journeyings; and to this extent the Herodotean concept of distinct races contains a little historical truth; but the archaeological evidence to date (though much more is expected) emphasizes the continuity of local development, stimulated and influenced by both western and eastern cultures, in the Dniester-Yenesei continuum. The thousand years of Skythic ethnic identity, which Herodotus denies, is archaeologically represented by the rapprochement of the Andronov, Tazabagyab, Abashev, and Srubny cultures in the Euro-Asiatic Bronze Age, and the redistribution of populations due to the spread of agriculture in the fertile areas at this period. The later date for Skyth ethnogenesis apparently required by Herodotus will then refer to his concept of the Skyths as the east Caspian race distinctive in the Iron Age, and correspond to the changes in the period 1200-700.

The Herodotean concept is interesting not only for its contrast with the vulgate Greek tradition of the Kimmerioi, but also with the contemporary records of the Skyths. The first Skyth mentioned by the Assyrians is Išpaka, the ally of the Kimmerioi, Mannai, Medes, and Sapardai. These Sapardai have been identified with the Sardians, but may perhaps rather be compared with the Souardanoi of the Caucasus: Išpaka's allies are then all Caucasian or Transcaucasian peoples. The next Skythian leader mentioned by

name is Bartatua (Protothyes), and his son Madys or Madyes is mentioned by Herodotus in connection with the events of 613 B.C.; Madys is also mentioned as the conqueror of some Treres, and in this aspect he is called a Kimmerian. Thus the contemporary and non-Herodotean sources do not clearly separate the Skyths from the peoples of the Caucasus: similarly the Persians later call the peeples both east and west of the Caspian by the one name, Saka.

The Herodotean distinction between Medes and Persians on the one hand, and Urartians on the other, and between Skyths and Kimmerioi and Thracians in Asia, is thus not derivable from Asiatic tradition of this period (including contemporary records), nor from the vulgate Greek tradition. The only alternative source for the clearly defined notion of ethnos in Herodotus' thought would seem to be the Ionian discipline of geography, presumably as established by Hekataios; but we are in much need of a survey of the Greek concepts of ethnos at various periods, particularly in mythic and popular thought. This last is pertinent in the case of the Medes, of whom some Greeks apparently thought they had said enough when they made Medos the son of Medeia of Kolchis: this statement seems to represent a Caucasian or Transcaucasian view of the historical succession of Kolchian, Kimmerian, and Median state-power in the long fight against the older slave states of Urartu and Assyria, while the Ktesian and Hellanikan view stresses the Urartian inheritance of the new empires, and so is rather an Armenian, Median, or Persian view of history.

We may now set the various traditions side by side and compare their treatments of the historical processes in this period:

Greek tradition	Persian tradition (including Ktesias)	Historical events and processes
c860 Thracian "thalassocracy"	Arbakes ends Assyrian imperialism	Arame founds the Urartian state
c835	Sosarmos (Sarduris I)	Assyrian attacks on Parsua (827) and Media (821)
c810 Semiramis Rhodian "thalassocracy"	Mandakes (Menuas)	Vannic attack on Parsua
c785 Phrygian "thalassocracy" "Kimmerian" raid traditionally in 782.	Artykas (Argistis I)	Vannic conquest of Parsua (781-74) and Media (766)
c760 Cypriote "thalassocracy"	(Sarduris II)	744 Assyria in Media 736 Devastation of Parsua
c735 Phoenician "thalassocracy" Deiokes the "Mede" Egyptian "thalassocracy"	Achaimenes I (reorganisation of survivors of 736) Arbianes (Ramas I)	715 rebellion of Daiakku of Mannai
c710 (Median lacuna)	Teispes I	707 Kimmerian war with Urartu; 705 Kimmerioi in Tabalia war with Assyria 691 alliance of Parsua with other rebels
c685 Milesian, then Carian, "thalassocracies". Perses father of Achaimenes the younger leaves the "Chaldaioi" and goes to Artaia.	Kambyses I	679 Kimmerioi and Dahai in Tabalia and Kilikia on the Halys. Išpaka the Skyth an ally of Media, Mannai, Kimmerioi, Sapardai. Bartatua and Assyria
c660 Gyges Phraortes establishes the Median state form	Kyros I Achaimenes II (organisational fusion of the Artaioi and Persian immigrants) Artaios Parsondes of the Kadousioi	c652 Tugdamme of the Umman Manda (Kimmerioi Treres and Lykioi) kills Gyges. c640 Sandrahšatra of Kimmerioi in Kilikia on the Halys defeated by Assyria: disintegration: Madys conquers the Treres.

c635	Kyaxares of Media	Teispes II first Persian king of Anšan Artynes	Fall of Nineveh: Sakai allies of Media
c610	The Skyth "empire"	Ariaramnes Astibaras' struggle with the Sakai and Parthians	Disappearance of Elam. Persians in Tyre? Medo-Lydian war.
c585	Astyages	Arsames Aspandas-Astyages	Ištumegu king of the Umman Manda

c560 Foundation of the Persian empire, drawing on Elamite historical experience, as well as Urartian, and that of the confederacy of the Umman Manda.

Little comment is necessary, for the simple juxtaposition makes most of the explanations required. The rise of Median and Persian power out of the conflict of Urartu and the surrounding tribal peoples is particularly clear, and the selection of particular historical processes by the different traditions illuminates their interests and outlooks. The relation of these partial interests to one another is however such that, by comparison with the contemporary records (which are, of course, also selective) a general notion of the historical processes can be made out. It seems that by the beginning of the ninth century there was a general stabilisation of forces throughout eastern Europe and western Asia, based on the full exploitation of the new metal of the iron age, and a number of developing cultures may be discerned; Greek geometric in the mainland, the "sea-powers" in the Aegean and eastern Mediterranean associated with the peoples of the Pontos and Anatolia; the renascence of Assyrian power, and the formation of the Urartian state. In the last quarter of the ninth century these communities are formed

so that a period of interaction follows: the Aegean Greeks come into contact with Assyria under (or within living memory of) Semiramis, and Urartu and Assyria begin their struggle. The process continues with increasing ferocity for a century, and in the last quarter of the eighth century new organisations begin to emerge: the Kimmerian confederacy, the Median embryonic state form, and a new Persian tribalism shown in the phratric tradition. In the seventh century the conflict between these new forms, and of each of them with northern military tribalism, destroys the old states of Urartu and Assyria, and in the sixth century this process is completed with the Persian conquests. Thus the most general view would see the years from about 900 to 560 as a unitary epoch, during which there were elaborated and evolved the forms of social organisation suitable to an iron age economy. Before this, both contemporary records and tradition go back through a period of disintegration, reorganisation, and redistribution of population among the desert tribes in the south and Euro-Asiatic peoples in the north, to an older constellation of interactive organisations, represented in western Asia Minor by the Lydian "thalassocracy". The akmai of these various organisational forms may perhaps be temporally related as follows:

11th century:	Lydian "thalassocracy" (Armas the Lydian and Hittite moon god has the same name as Hermes, the Greek god of trade: his transformation will have begun in this period)
10th century:	redistribution of populations: Dorians in Greece, buchelkeramik Thracians in NW Asia Minor. Achilles' Trojan War. Stability in Palestine (Solomon's foundry at Ezion Geber)
9th century:	Greek geometric culture: stability in the Aegean. Renascence of Assyria. Formation of Urartian state. Rise of Phrygia

c825-725 Interaction of these organisations: Greece/Assyria, Assyria/Urartu, Phrygia/Greece, etc.

c725-600 Rise and conflict of new organisations: Kimmerian confederacy, Median state form, Persian (southern) military tribalism, Skyth (northern) military tribalism. Destruction of old state forms: Assyria, Urartu, Phrygia, Herakleid Lydia. Rise of Greek competitive economy: Armas established as Hermes, the god of trade.

β) on Assyria: (1) the names of the kings

Diodoros, our main source for the Ktesian history of Assyria, mentions only five names from the Ktesian list. The kingdom began with Ninos the eponym, Semiramis his wife, and Ninyas their son; in the reign of Teutamos, the 20th king ruling a thousand years and more later, Troy was taken by the Greeks; and in the time of the 30th king, Sardanapalos, after 1360 years (Diod.2.21.8), the Assyrian empire fell to Arbakes the Mede. Kephalion is reported by Eusebius as quoting Ktesias for the statement that the first 23 kings ruled 1000 years: we should therefore read Diodoros as meaning that Teutamos was the 20th king after Ninyas, and Sardanapalos the 30th king after Ninyas, so that there were 33 names all told in the Ktesian list.

Ktesias therefore held that there were eleven Assyrian rulers from Teutamos to Sardanapalos inclusive. This is the number of names given in this portion of the list in the Chronographia, and it is reasonable to suppose that here the Chronographia names derive from Ktesias. But the Chronographia makes Teutamos the 26th king instead of the 23rd, so that - even if there were no other differences - it contains three names that were not in Ktesias. The state of the surviving lists offers no clear suggestion as to which were the three redundant names; when

Moses of Khorene omits the three successive names of Belochos II, Balatores (or Belleperes) and Lamprides, he replaces them by the name of Vestucarus. Some of these earlier kings seem to be Urartians (in the Chronographia list: 11. Mamithos, 14 Mamilos, 21 Sosmares, 24 Sosarmos), and Ktesias may have omitted some of these, as being already present in his list of "Medes".

Of the Ktesian names known, Ninos is the eponym and Ninyas his double; Semiramis is Sammuramât imagined as the great goddess of Asia. Teutamos is an Asianic name, conceivably intended as a rendering of an Assyrian Tukulti-[; Sardanapalos was no doubt once Assurbanipal, but not necessarily so for Ktesias, for the Herodotean Sardanapalos is Assurdan III, and the second Sardanapalos of Hellanikos is Senacherib.

2) dates. (a) Teutamos and Troy

If Ktesias dated the beginning of Media in 843, his last Assyrian year was 844, and the 1360 years of Assyrian are 2203-844. His Trojan War date is then later than 1203, "more than 1000 years" after the beginning of Assyria, and a generation after the Herodotean Troy. So if Teutamos is a Tukulti-[, the candidate is Tiglath Pileser I (1114-1076), who reached Komana in Cappadocia, and may have been remembered, in his Asianic disguise, by the Danaans of Mopsuestia, the Perseids of Tarsos, and the Kilikes. This would be extremely doubtful if it stood alone, but the suggestion is supported by the following considerations.

(b) the fall of Assyria

The date 844 for the fall of Assyria is very near indeed to the true date c840 for the rise of Urartu under Sarduris I. The

impress of Urartian tradition on the surviving Assyrian lists is strong: in addition to Mamythos-Mamilos and Sosmares-Sosarmos mentioned above, and the northern mythology of Semiramis, there are the names of Arios, who is the Armenian Ara, Plato's Er son of Armenios; and Aralios-Aranos, who represents the Armenian "gods Aralez".

The generation count, however taken, supports the implications of the absolute dating. It may be taken as 10 names before Dareios, 11 chronographic 27-year generations before Kyros, or 4 generations before Arbianes, the contemporary of Sargon II. The three generation counts applied to the Assyrian generations give:

Assurnasirpal II	11 generations before Kyros		
/			
Shalmaneser III	10:	and 4 generations before Arbianes	
/			
Shamsi Adad V	9:	3 : and 10 before Dareios	
/			
Adadnerari III	8:	2:	9
/			
Tiglath Pileser III	7:	1:	8
/			
Sargon II	6:		7 (=Arbianes)
/			
Senacherib	5:		6
/			
Esarhaddon	4:		5
/			
Assurbanipal	3:		4
x			
Kyaxares	2:		3
/			
Astyages	1:		2
Kyros			1
Dareios			

Of the three candidates, Shalmaneser III is the most important, for he is the true contemporary of Arame of Urartu (Arbakes the "Mede"); he is 10 true Assyrian generations later

than Tiglath Pileser I (who may be Teutamos, 10 names earlier than Sardanapalos); and moreover he was in contact with far eastern Greeks: men of Kue (Kilikia Pedia) fought him at Karkar in 853, and he attacked them in 833 and cptured Tarsos in 832. He thus belongs to the greatest extension of Assyrian power just before the struggle with Urartu wherein Assyria was driven back until Assurdan III (an older brother of Tiglath Pilser III) lost the empire. It seems therefore reasonable to envisage the possibility that the Ktesian Sardanapalos represents the historical Shalmaneser III; and that the Ktesian historiography of the last ten generations of pre-Urartian Assyria is based not on Persian, but far eastern Greek tradition.

(c) the upper terminus

The Ktesian upper terminus of 2203, and the duration of 1360 years, go back beyond the true beginning of Assyria to the time of the empire of Akkad and the reign of Naram-Sin, who reached the west and was worshipped there until the time, at least, of the Cappadocian tablets (1850-1775). The concept of the great conqueror Ninos (although his name comes from Nineveh) would seem therefore to rest on Syrian traditions of the first Semitic empire. The importance of this empire for northern Syria was great: it was at this time, for instance, that cuneiform was introduced at Ugarit. Thus through the north Syrians, the Cypriotes, the Syro-Hittites and the far eastern Greeks there could have been transmitted the tradition of the first Semitic empire.

Thus the traditions about Assyria on which Ktesias drew seem to have belonged to the far east Greeks, and to have emphasized:

1) the founding of a Semitic empire of upper Asia c2200 B.C.
based on N. Syrian and Cypriote tradition

2) the invasion of Cappadocia by Tiglath Pileser I c1110 B.C.
after the settlement of "Perseus" at Tarsos

3) the invasion of Kue (Kilikia Pedia) by Shalmaneser III 833/2 B.C.
combined with the rise of Urartu under Arame, and
the fall of old Assyria under Assurdan III

iii) non-Ktesian and non-Herodotean elements in Kephalion

The Eusebian Chronographia gives a summary of the Assyrian history of Kephalion, who claimed to draw on the three fifth-century sources, Hellanikos, Herodotus, and Ktesias. How much of the detail given is Kephalion's own we do not know; the elements which are inconsistent with Herodotus' view, and with Ktesias as represented by Diodoros, are as follows:

∝) Perseus and Belimos: (1) Dates

In the 640th year of Assyria, when Belimos was king, Perseus arrived in Asia.

According to the Chronographia list, this Belimos is the same as Belochos II. It is noteworthy that the Model date for Perseus is 1416 B.C., and 640 years before this is 2056, the date taken by Eusebius for the upper terminus of his Assyrian list.

(2) historiography

In the Chronographia version of this tradition, Perseus arrives during that part of the reign of Belochos when his daughter Tratres Akhurardistsmin was reigning with him. In the EB list, this queen appears as Atossa who was also Semiramis. Atossa is the Persian queen who was daughter of Kyros, wife of Dareios and mother of Xerxes; Semiramis is Sammuramat, who recorded her name as the wife of Samsi Adad V, the mother of Adad Nerari III, and daughter-

in-law of Shalmaneser III. Thus the daughter of Belochos is, as it were, the triply distilled essence of female royalty; and she also, in the myth of Perseus, once more represents Greek acquaintance with Assyria in the time of Sammuramat.

β) Pannias and the Argo; Mitraios and Medeia

The next notice in Kephalion, although preserved in both the Armenian Eusebius and the Greek of Synkellos, is not easy to interpret. It appears to say that in the next generation when Pannias was king, the Argonauts sailed to the Phasis and Medeia of Kolchis, and Herakles, separated from his companions for love of Hylas, wandered through Cappadocia. One thousand years after Semiramis will be found to be in the time of Metraios. Medeia returned to Kolchis with her son Medos, from whom the Medes and Media were named. The successor of Mitraios was Tautanes, the contemporary of Troy.

(1) dates: The date of 1000 years after Semiramis is disputable on several grounds. In the first place, if the first Semiramis is intended, it is odd that the reckoning is from her, and not from the beginning of Assyria, i.e. the accession of Ninos. Secondly, 1000 years after Semiramis for Metraios is too long, so far as our evidence goes, either from the surviving lists or from Ktesias, who makes Teutamos 1000 years after Ninos. Thirdly, and conclusively, 1000 years less the 640 years up to Perseus leaves 360 years from Perseus to his great-grandson Herakles, a dating impossible for any Greek, however late, to have created. It may be suggested therefore that the period described was intended to be that from the second Semiramis and Perseus to the

return of Medeia to Kolchis at the end of the Argonaut generation, and that for 1000 (=A), we should read 10x plus 1 =)A. According to the lists, the number of years from the accession of Belochos to the accession of Metraios was 201 (Chronographia), <201> (Syntomon), or 206 (EB), so that the most probable mend is καὶ αὖθις σα΄ for καὶ αὖθις α΄ that is, 201 years. Metraios would then be 640 plus 201 = 841 years from the beginning of Assyria, which is around the dating given by the lists. Then we have

201 years= 39 x 5 plus 6.
1. Perseus: flees to Asia: Belimos (Belochos) and Semiramis
2. Alkaios: Perses founds the Persian nation
3. Amphitryon:
4. Herakles: the Argonauts: Pannias: Medeia
5. .....Medos founds the Median nation: Metraios

(2) historiography: The Medes are here reckoned as obtaining their organisational form three generations later than the Persians: but it is doubtful whether any such comparison was originally intended. The Medes and Persians were affiliated to Medeia and Perseus to give them a place in the constellation of categories in Greek thought, and not to indicate their relationship to one another, which, in this form, is an inference from the pre-existing relationship between the Greek concepts. In this therefore there is no statement illuminating the Greek views of the Medes and Persians; such illumination is found in the alleged relationships of the Medes and Persians with the Assyrians. Belimos and Belochos both seem to be associates of the name of Bel, the lord Marduk of Babylon, so that Belochos and his daughter represent the principles of male and female divinity in Mesopotamia. Pannias is a more enigmatic figure: the EB adds to his name the note "Zeus",

but this perhaps belongs properly to Mitraios (Mithras). Since Pannias is the contemporary of the supposed first Greek acquaintance with the eastern Euxine, he might be expected, on the analogy of Semiramis, to be a rendering of a historical name, but we have no evidence.

Mitraios the contemporary of Medos is the Iranian Mithras, the sun-god, whom Herodotus (1.131) calls a goddess, and identifies with Ourania. The Hittites worshipped a sun-goddess, and survivals of her cult may underlie the Herodotean statement. In Greek myth, Medeia is a granddaughter of the Sun, and modern Georgian folklore recognises a sister sun and brother moon; the ancestry of this belief has been traced back to the cult of the moon-god Armas in Hellenistic Georgia, and thence to a proto-Hattic linguistic element among the Katarza, one of the constituent tribes of Kolchis. It may therefore perhaps be that Medeia is a representative of the old Asianic sun-goddess, and that the formation of the Median nation in the time of her son and of Mitraios (Mithras the sun-god) is a statement that the transformation of the goddess into a god was insome way associated with the process of Median ethnogenesis. Also, the Herodotean belief that Mithras was a goddess may be a statement derived from some source which still worshipped the sun-goddess, and whose divinity was known to the Greeks as Aphrodite Ourania.

) Sardanapalos

Kephalion ends his Assyrian history by stating that Sardanapalos became king in the 1013th year of Assyria, that is, with the reckoning argued above, 172 years after the time of Metraios and Medos. This means that Sardanapalos was placed much earlier than in the lists that survive. Eusebius and the EB say that Sardanapalos was the Greek name for the Assyrian Thonnos Konkoleros. No such, or remotely similar, Assyrian existed, and the name Konkoleros can be explained from the lists of the Babylonian school (see below). Perhaps then the "Assyrian" name was Thonnos or Konkoleros, and Thonnos resembles a name in the surviving lists, Thineus, the third or seventh successor of Mitraios, who accedes 99 (Chronographia), 236 (Syntomon), or 107 (EB) years after the accession of Mitraios: that is, the surviving lists show an unstable tradition at this point.

We have seen above that there is some suggestion of the use of the Model date for Perseus in the tradition represented by Kephalion. This, applied to all the dated details would give 2056 for the accession of Ninos (as taken by Eusebius), 1416 for Perseus, Belimos, Belochos, and Semiramis II, 1215 for Medos and Metraios, and 1043 for the accession of Sardanapalos, this last

being a century after the Model date for the Return of the Herakleids, near the end of the generation of Agis and Gras, the founder of Greek Aiolis. Thus the fall of old Assyria seems in this tradition to be placed about the time of the colonisation of Lesbos.

This terminus, and the use of Model dating, suggests that Kephalion took these details from his third source, Hellanikos of Lesbos. Hellanikos (F63) recognised the existence of two Sardanapaloi, of whom the second, the son of Anakyndaraxos (Akrapaxan) captured Tarsos and Anchiale. Sardanapalos II therefore represents the historical Senacherib, who campaigned in Kilikia Pedia in 696 B.C. The first, if our argument is correct, will be the Thineus (Thonnos) of the surviving lists, which make him 316 or 324 years earlier than Sardanapalos II; the period from 1043 to 696 is little longer, 347 years. That is, for his second Sardanapalos, Hellanikos seems to use a point in the history of the far east Greeks, and to reckon about 39 x 18 generations from Perseus to the rise of the Kimmerioi to power in Tabalia. (Reduced to quarter-centuries, the 18 generations occupy the period c1150-700, agreeing with the approximate historical date of "Perseus" in Tarsos.) The 373 years from Perseus to the first Sardanapalos is ofer 39 x 9 years, so that Sardanapalos II is 9 generations or so later: a count of nine reigns (not generations) applied to the Assyrian king list gives us Shalmaneser III as the ninth predecessor of Senacherib, thus agreeing with the historiographic view of Ktesias, whose Sardanapalos seems to be Shalmaneser III plus Assurdan III.

This series of traditions preserved by Kephalion, and here tentatively ascribed to Hellanikos seem therefore to have emphasized:

(1) the settlement of Perseus in Asia: the date was fixed by the use of the Chronographic Model

(2) the generation after the settlement of Perseus, the Persian nation is formed; this is an inference from the Greek concepts used, and is not, therefore, a historiographic statement.

(3) the same is true of the traditions dating the voyage of the Argo and the formation of the Median nation: this last is apparently given the chronographic date of 1215, about 39 x 17 generations before the fall of Asytages.

(4) the first Sardanapalos seems to be dated to 1043 and to represent Shalmaneser III; the second Sardanapalos represents Senacherib and was probably dated about 700.

Together, these traditions amount to the historiographic view that the age of the Persian and Median nations was great (in contrast with other views) - about 18 generations before the fall of Assyria in the case of Persia, and about 15 in the case of Media. It seems likely, moreover, that, the dating of the upper terminus of Assyria is due to an application by Kephalion to the Hellanikan tradition of the Ktesian duration, for 696 B.C. (the true date of Senacherib at Tarsos = Sardanapalos II) plus the Ktesian 1360 years gives 2056 B.C., 640 years before Perseus in 1416. That is to say, Kephalion's upper terminus taken over by Eusebius probably does not belong to the same tradition as the stories of Perseus, Herakles, and Medos in relation to the Assyrian list, and therefore cannot be ascribed to Hellanikos. Consequently, the evidence for Hellanikos' history of Assyria is limited to the years 1416-696 = 720 = 36 x 20 years. This looks like a generation-count in far east

Greece, representing the time from the "founding" of Tarsos to the rise of the Kimmerian power in Tabalia. We conclude that Hellanikos knew the true date of the capture of Tarsos in 696, and the generation count for the far east Greeks before that.

) Comparison of the fifth-century sources: This may best be shown:

Attributed to Hellanikos	Ktesias (Persian)	Herodotus (Babylonian)
ASSYRIA: perhaps Belimos and Semiramis represent the basic principles of Mesopotamian culture and were imagined as coeval with Perseus: if so, Greek culture was imagined as considerably older than Assyrian imperialism.	begins 2203, i.e. with the first Semitic empire (of Akkad) as remembered in Levantine tradition.	begins 1228, with the overthrow of Kassite power
The first Sardanapalos accedes 1043, about the time of the colonisation of Lesbos, identified with the rise of Urartu in the time of Shalmaneser III	Ends in 844 with the rise of Urartu in the time of Shalmaneser III	
Ends, apparently, in 696, with the capture of Tarsos as the last effort of imperial Assyria before the beginning of Kimmerian conquests in 695.		Ends in 709, supposed date of the revolt of Daiakku of Manna, (and real date of Sargon's march into Phrygia)
MEDIA: ethnogenesis dated by Greek categories and chronography to 1215. But content of statements speaks of transformation of sun-goddess into god at an unknown date: Medeia the Heliad, Medos v Hiriaios	Identified with rise of Urartian state under Arame	Identified with the Mannai at first, and independent of them after a considerable but disguised, lacuna.
PERSIA: ethnogenesis dated by Greek categories to 1377. But content of statements refers to events c685	Emerges from the Urartian continuum about 660	Ethnogenesis as in Hellanikos, but Achaimenes I dateable c735

iv. Kastor on the empire of upper Asia

The Chronographia of Eusebius says that Kastor gave no years to Belos, although acknowledging that he was once king; his chronography began with the attribution (in agreement with Ktesias) of 52 years to Ninos and 42 years to Semiramis. Their successor was Ninyas, and the last Assyrian king was Ninos II, son of Sardanapalos, making in all 1280 years.

α) dates

This total is very near to Eusebius' own Assyrian list of 1240 years ending 40 years before Ol.1; the stated total of 1280 years for Kastor's list is then probably a statement of the Eusebian rendering of it, beginning 40 plus 1240 years before 776 B.C. The origin of this upper terminus has already been shown to lie in the application by Kephalion of Ktesias' duration of 1360 years to the history of Assyria, based on the Chronographic Model and ending at the true date 696, which we have attributed to Hellanikos. The Eusebian date is therefore not Kastor's; but Kastor's dates may be discovered.

The attribution of the Eusebian dating to Kastor suggests that the Eusebian chronography of Assyria was mainly Kastor's in origin. The "historical" notes given by Eusebius in the course of his list include the war of Zeus and the Titans in the undated reign of Belos; the chronographic absence of Belos is Kastor's notion. There is also a notice of Perseus in the time of Tratres daughter of Belochos; of the Argo and Herakles in the time of Pannias; of Troy in the time of Teutamos; and the final statement that Assyria lasted up till the time of Lykourgos the contemporary

of Thespieus of Athens.

1. We have already seen that Lykourgos the contemporary of Thespieus was probably dated by Kastor to 828 B.C. (See App. I) Kastor's Assyrian kings therefore ended in 829, 53 years before Ol.1.

2. Kastor's last king was Ninos II, who appears as the last king in the EB list, where he is credited with 19 years. With the 1240 years before the end of Sardanapalos given by Eusebius, this makes a total duration of 1259 years.

3. These 1259 years ending in 829 begin in 2087, which is Kastor's upper terminus for Sikyon, and 1404 years before the end of the Athenian dynasty in 683 B.C. The 1404 years are the LCM of 39, 36, and 27, the three main kinds of chronographic generations, so that Kastor has created, as it were, a fourfold (351 x 4 = 1404) Chronographic Model of oecumenical scope.

On these dates, the Assyrian contemporary with Kastor's Troy in 1188 is Teutaios, not Teutamos. Teutaios is the king named in the list of the EB: Teutamos is taken by Eusebius from Ktesias.

Similarly, Pannias, with Herakles, is dated 1336-1292: this agrees with Kastor's date for Eurystheus, acceding in 1315 (See Appendix VI).

But the date given for Belochos (with Perseus) is 1473-49, while Kastor's Proitos and Akrisios begin in 1363. Eusebius has therefore taken this synchronism, together with his dating of the upper terminus, from Kephalion.

Finally, if Assyria ends in 829, its destroyer Arbakes should be reigning in that year. The Median list which begins at this date

is that of the EB (see App. VIII), which is therefore Kastor's.

β) historiography

So far as we know, Kastor was an innovator when he made the beginnings of Asiatic and European history coeval, and this concept, although expressed arithmetically, is by no means an outcome of pure mathematics. Herodotus was convinced that Greek history was only a fraction of Egyptian; and Ktesias' work is heavy with the experience of Asia; the period of the Diadochoi produced the work of Berossos,(going back to 120 saroi before the Flood), and translations of Egyptian records. The Greek sense of cultural inferiority in the face of these millennia of alien accumulations of experience was keen enough to be seized upon and remembered by the Christian apologists of Semitic priority; and the Romans had even less of a history than the Greeks. Kastor's coeval date was therefore an assertion of European equality with the oriental cultures; his history ended in 61 B.C. with Pompey's triumph, and it seems that Kastor was rewarded for his work with the title of Philoromaios. The reason is plain: the cultural equality of Europe with Asia served as a title-deed of Roman dominion.

Kastor's synchronisms between European and Asiatic history are taken from his fifth-century predecessors, and differ from theirs only in making Teutaios instead of Teutamos the contemporary of Troy.

Kastor's formulation of the period of the fall of Assyria is new, but the content is old. The end of Assyrian imperialism is directly contrasted with the establishment of Lykourgan Sparta: Lykourgos as a symbol of the new Greek consciousness in the last part of the ninth century replaces the Herodotean Homer and Hesiod,

and stands together with Kastor's dating of the first certainly and completely alien thalassocracy (the Phoenician, 848-04) as a statement of the emergence of the historical communities. The retrodating of the historical Spartan organisational form to the last part of the ninth century serves to underline the importance of that period in the general Greek view of history, which reflects the establishment of Hellenic nationality and its impact on areas as far apart as Phoenicia, Kolchis, and Italy. For the far eastern Greeks of Cyprus and coastal Kilikia, this period seems to have been closely associated with the rise of new communities, and national remodellings of older communities: the Urartian state form in Armenia, the revolt of Jehoiada in Judah, are historical examples which might be multiplied. We have already traced the development of the new form of national organisation to its climax in the establishment of the Achaemenid empire, which claimed to draw on the experience of Urartu and the Umman Manda rather than on that of imperial Assyria. Thus the Achaemenid empire seems to have claimed to have arisen on the basis of a coalition of the new national movements, some of which were not far removed from tribalism. This movement, idealised as a brotherhood of free nations, seems to be the Persian concept which is represented by Herodotus as equivalent to Greek democracy. Within the Persian empire itself, this feeling of brotherhood seems to be expressed in the liberal religious policy of the Achaemenids, so that the syncretising cults of the period seem to reflect the recognition that a common truth could be expressed in many,

interchangeable, forms. The Zoroastrian religion more sternly regarded these divine forms as illusory, and described the true content of universal process in the struggle between Ahuramazda and the lie. This would seem to be a further and more fully worked out formulation reflecting the latest stages of the process establishing the notion of a brotherhood of nations. Later Persian tradition has been held to date Zoroaster three centuries before Alexander (i.e. in the third quarter of the seventh century), or about 660-583, or in the time of Hystaspes father of Dareios (i.e. in the third quarter of the sixth century). These dates would seem to be not so much the dates of the physical existence of one man, as decisive periods in the formation of Persian intellectual forms: the seventh-century fusion with the Artaioi and its consequences, and the sixth-century achievement of empire. Characteristically enough, Zoroaster's work, that is, the final formulation in the development of the new intellectual system, is not placed at the imperial court or in the older cultural centres, where the syncretising movement would tend towards a flabby and unprincipled carelessness of content in the intermingling of forms; but in Media or Bactria, on the eastern periphery of the new area, where tribal traditions would still be strong and vigorous, and the forms of thought, including the divine categories, not too heavy with the experience of obsolete state forms to hinder further development. Moreover, if Zoroaster's convert Hystaspes was, as is suggested above, a biological Artaian and organisational Persian, he would represent the culturally younger and less experienced section of the

Achaimenidai, for whom the creation of a new and more useful intellectual instrument would be a pressing need.

It would appear that the chief characteristic of the post-Assyrian world was the formation of nationalities recently emerged from tribalism, and a general distinction between the nationality and the state: the state comprised many nationalities in Persia, the nationality many states in Greece. The older Assyrian form of organisation found its most general intellectual expression in the enforced cult of Assur, which describes the imperial policy of a community which deliberately attempted to destroy the cohesion and consciousness of other peoples by deportations and devastations.

The development from tribal to state organisation probably had another fairly general and extremely important result in social organisation. The development of the Greek anchisteia, in which the oikos supersedes the clan, is parallelled by the development of new forms of village life in Euro-Asia and by the Magian insistence on next-of-kin marriage on the Iranian side. This also develops in Persia during the early imperial generations: Kambyses established a precedent by marrying his sisters, and Dareios instituted a law limiting the number of families from which queens might be chosen. The Greek recognition of Persian similarity to their own customs is found in the story of the eponym Perses, who inherits his kingdom not as son but as anchisteus of Kepheus, and the similar Herodotean story of Kyros, who succeeds Astyages as an anchisteus enforcing his rights. These myths belong to

the same world of thought as the Herodotean debate on democracy and its rival forms, and together with such events as the flight of Zopyros suggest that the fifth-century Achaemenid ruling group still retained many ideas derived from its period of tribalism, and that the Greeks were willing to seize on these as being identifiable with their own tribal inheritance.

It has been suggested that the bread-winning basis of this general process from the ninth to the mid-sixth century lay in the possibilities of new distributions of free, and later slave, labour through the elaboration of iron age productive techniques. Iron is so commonly found that almost every community of any size can make for itself iron tools of some sort. But the production of high grade metal is a very complex technique, turning upon the knowledge and use of furnace and fuel as much as upon the nature of the ores. It is probably therefore of importance that the earliest Greek reference to the Chalyb country is to Alybe the birthplace of silver, suggesting that the iron and steel making industry there was founded upon many generations of experience in the production of more easily worked metals. Thus while iron tools of some sort could certainly be made in many places, the hard iron of "steel" required to supersede the use of bronze or stone is not likely to have been discovered many times, nor the knowledge and experience to have spread rapidly, and this expectation is borne out by the fact that, although the iron age is generally held to be fairly established inthe near east by the tenth and ninth centuries, new kinds of tools are not invented until the sixth and fifth. The change in the earlier iron

centuries lay in the use of iron instead of stone and wood for tools already in use, particularly agricultural implements. Thus the first stage of the introduction of iron would be mainly effective in the labour of the peasants, facilitating an increased productiveness of traditional labour forms in smaller self-contained communities. Communities of this kind are characteristic of much of the near east at this time: the embryonic Greek city states, the Syrian, Phoenician and Philistine cities, the small kingdoms of Israel, Judah, Moab; the shadowy unity of Egypt, or of Mesopotamia, hardly disguised similar situations there; and within Asia Minor the supposed kingdoms of Lydia and Phrygia are hardly to be distinguished from whatever organisational forms were held by the Mysians, Bithynians, Paphlagonians, Carians, Lykians, Lykaonians and the rest. These communities existed at the time when Assyria constantly endeavoured to exert control and monopoly over the metal trade routes from Kilikia.

The emergence of Hellenic national consciousness, and the beginning of recognisably Hellenic interaction with other distinct communities seems to coincide temporally with the disintegration of the Assyrian trading continuum; so that the emergence of Greece is contemporary with the rise of Urartu and other similar developments in the near east. But the socio-economic history of Assyria is not yet sufficiently developed to make an examination of the causes at work in this period fruitful.

B. The Babylonian School

i. Berossos

The Babylonian history of Berossos comprises four historiographic epochs according to the tradition upon which he drew:

(1) 10 kings before the Flood reigned for 120 saroi

(2) 86 kings thereafter, beginning with Euechoros and Chomasbelos, reigned for 34,080 years (Synkellos), or 33,091 years (Eus.)

(3) five dynasties:
- 8 Medes for 224 (marginal figure 34) years: according to Polyhistor, the first was Zoroaster.
- 11 kings for (marginal figure 48) years
- 49 Chaldaioi for 458 years
- 9 Arabes for 245 years
- 45 Assyrioi, with Semiramis, for 526 years: according to Polyhistor ap. Agathias 2.25, the first dynasty ended with Beleous the son of Derketades, and Beletaras then founded the second. The Khorsabad list shows a change of dynasty at the death of Enlil kudurra usur son of Tukulti Ninurta I in 1192, and the foundation of a new dynasty by Ninurta apil Ekur in 1191.

(4) detailed list:

Phulus: Akises in Babylon		
Senacherib 18 years: Merodach Baladan in Babylon		(693-
Asordan his son: 8 years: Asordan in Babylon		(675-
Sammuges, 21 years		(667-
Sardanapalos his brother, 21 years		(646-
Nabupalsar 20 years		(625-
88 years from Senacherib		
Nabukodrossoros 43 years		(605-
Amilmarudochos (1)2 years:		(562-
Neglisaros 4 years		(560-
Nabodenos 17 years		(556-
Kyros 9 years		(539-
Kambyses 8 years		(530-
Dareios 36 years	(accession year	522)

The first of these epochs is compared by the Christian chronographers with the Biblical narrative, but not used chronographically. The second, as represented by the name of Chomasbelos, is chronographically only represented in the Syntomon,

and its extended time scale is never used.

The third epoch of Berossos seems to arise from a synchronous history of Assyria and Babylonia up to the time of Tiglath Pileser III, the Pulu of Babylon. The identification of these dynasties with their historical prototypes is a matter of some difficulty: perhaps the most probable line of argument proceeds as follows:

Since Phulos accedes before 693, the immediately preceding 45 Assyrians in 526 years begin before 1219: the era intended was probably that given in the Herodotean version of Babylonian history, the defeat of the Kassites in c1228. The 45 kings are however too many for this period, taking us back, according to the true list, to the name of Nur ili, 1463-52.

The similar period of 49 Chaldaian kings in 458 years may be intended to be contemporaneous, and reckoning from a common lower terminus in 702 (i.e. 1228 minus 526), the year count goes back to 1160 B.C., which seems to represent the accession of the Second Dynasty of Isin.

The puzzling Arabs are not made much more comprehensible by the fact that a dynasty of this name is detailed in the Syntomon, with kings who seem to represent the Second Dynasty of Isin (see below). There were historically 11 kings of this dynasty for 232 years: so that if Berossos intended the "Arabs" to represent Isin II, his 49 Chaldaioi were divided into dynasties, of which only this, the first, has survived in excerpts from his work.

The preceding 11 kings, if the Chaldaioi begin with Isin II, will be the last 11 kings of the Kassites after about 1228 B.C.

thus synchronising Babylonian and Assyrian history. Consequently, above this point the eight "Medes" may belong either to Assyrian or Babylonian history: the year count 1228 plus 224 = 1452 B.C., the last year of the first of the 45 Assyrians, Nur-ili. This is historically about the time of the rise of Mitanni, whose name may perhaps be represented by the "Medes" of Berossos. Eight royal names of Mitanni are known: the second is Šauštatar about 1450, and the eighth is Mattiwaza about 1359: they were overlords of Assyria for about 75 years at most. The figure of 224 years may therefore be intended to give their upper date in relation to 1228 B.C., while the marginal figure of 34 gave the duration of their rule.

If this argument is correct, the summary of this section of Berossos may be reconstructed on these lines:

1) (a period of 224 years, beginning with) 8 Medes for 34 years	:1452:	beginning of 45 Assyrians (of whom
2) 11 (Kassite) kings for (48) years	:1228:	x kings) rule 526 years
3) 49 Chaldaioi (of whom) 9 Arabes rule 245 years (and the total duration is) 458 years	:1160: to:	702 B.C.

The fourth epoch of Berossos is a reasonably accurate account of the Ninth and Tenth Babylonian dynasties, with which his detail may be compared as follows:

Akises	Ukinzer 732
Phulus	Pulu 729
Merodach Baladan	Marduk-apal-iddin II 722-03 (with interruptions)
Senacherib (693)	Senacherib 705-689 (with viceroys)
Asordan (675)	Esarhaddon 681-669 (.. ..)
Sammuges (667)	Samas-samukin 668- (brother of Assurbanipal)
Sardanapalos (646)	Kandalanu 647-26
Nabupalsar (625)	Nabopolassar 625-
Nabukodrossoros (605)	Nebuchadrezzar II 605-
Amilmarudochos (562)	Amilmarduk 562-
Neglisaros (560)	Neriglissar 560-
Nabodenos (556-39)	Nabonidus 556-39

The replacement of Kandalanu by Sardanapalos his overlord, and brother of his predecessor, is, as we shall see, important for the chronographic tradition.

ii. Abydenos and pseudo-Abydenos

Eusebius preserves two undated lists from Abydenos, one Assyrian beginning with Senacherib, and one of the Tenth Dynasty of Babylon. These compare with the true lists:

Assyria

Senecherib	Senacherib 704-681
Axerdis and Nergilos	Esarhaddon 680-669
Sardanapalos	Assurbanipal 668-633
Sarakos	Sin sarra iskun 623-612

Babylon

Bousalossoros	Nabopolassar 625-05
Nabukodrossoros	Nebuchadrezzar 605-562
Amilmarudokos	Amilmarduk 562-0
Neglisaris	Neriglissar 560-56
Labossorakos	Labaśi Marduk 556
Nabonedochos	Nabonidus 556-39

Senacherib is called the 25th king: the first of his 24 predecessors is identified by name count with Tiglath Pileser I. We may compare the far east Greek tradition preserved by Ktesias.

There is also an excerpt from pseudo-Abydenos, which offers a version of the beginning of Assyria denying the Greek view that Ninos was the son of Bêlos, and giving instead the generations Belos, Babios, Anebos, Arbelos, Chalaos,(Arbelos), Ninos I; and asserting that Sardanapalos was the last king, from whom to Ol.1 was 67 years. This is a muddle of Ktesias (the lower terminus) and anti-Ktesias (the genealogy of Ninos). The names inserted here between Belos and Ninos appear in the Syntomon Assyrian list between Teutaios and Theneus, in the order Sarbelos, Chalaos,

Anebos, Abios: Kastor did not use them. The names look as though they represent a collocation of divinities: perhaps Belos is Marduk, Sarbelos Sahar (Sin) identified with Belos, Anebos Nabu, Babios Babbar (Samas) and Chalaos (Ner)gal (Ninurta). Such names would be at home in a list which included Mitreis, and which was probably in the first instance built around a core of legendary and mythic names found in far east Greek traditions about upper Asia.

iii. Asiatic dynasties of the Syntomon

The Asiatic dynasties of the Chronographeion Syntomon form the major part of its profane historical records, extending from the Chaldaioi beginning in 2578 B.C. to the Saracens, and ending shortly after 817 A.D. The book as a whole is therefore a product of the ninth century Byzantine renascence; and in its chronographic period of Asiatic history it draws on a most elaborate and ingenious source, which incorporates both Babylonian and Biblical material into the most fully developed chronographic system, wherein the temporal macrocosm of 39 x 54 years from the Chaldaioi to Marathon contains a microcosm of 27 x 54 years for the Assyrian dynasty.

α) the Biblical influence

The influence of scriptural history is marked. The first king of the Chaldaioi is Nebroth (Nimrod), not the Berossian Euechoros. Phoula and Theglaphassa appear separately, as in I Chron.v.26; and the Assyrian list ends with Assorom = Esarhaddon, the last Assyrian mentioned in the books of the Kings. The Babylonian list ends with Baltasar instead of Nabonidus,

and the Median list identifies Astyages with Dareios the Mede. Thus the system as a whole is late, and the author is either Jewish or Christian, but one much addicted to profane learning.

β) The "Arabs"

The earliest kingdom is that of the Chaldaioi, and although this begins with Nimrod, the second king is the Berossian Chomasbelos. The seven kings to which the Berossian 86 are reduced are permitted to reign for 216 years only: this is 32 x 6¾, while the next, "Arabian", dynasty is allowed 200 = 32 x 6¼ years. The 32-year generation is otherwise only met in the Herodotean, & Berossian treatment of Media; and we should probably see in these figures the influence of the Berossian dynasty of Medes, who reigned 224 years = 32 x 7.

The names of the "Arabian" kings are in five of the six cases compounds of the divine names Marduk and Nabu. Such names do not appear in the native Mesopotamian lists until the second dynasty of Isin, and the "Arabs" of the Syntomon seem in fact to be a rendering of the names of that dynasty. The two lists may be compared:

Marduk šapik zeri	Mardokeparos
Ninurta nadin šum	
Nebuchadrezzar I	(Nabios: so Synkellos)
Enlil nadin apli	
Marduk nadin ahhe	(Mardokos: so Synkellos)
Itti marduk balatu	Hosimordakos
Marduk šapik zer mati	(Mardoko)Parenos
Adad apal iddin	
Marduk ahhe eriba	
Marduk zer....	
Nabu šum libur	Nabonabos

γ) The Assyrians

The Assyrian list of the Syntomon is the longest to survive. In its present form, it has 45 names, and 1441 years: Sardanapalos

is the 39th king. Synkellos mentions a similar list or lists, when he cites Tib. Cl. Polybius, Diodoros (!), Kephalion (!), Kastor (!) and Thallos as authorities for 41 Assyrians who lasted 1460 years from Belos to the 41st, Makoskoleros, son of Sardanapalos. Thallos seems to be the specialist on Asiatic history among these authorities: the evidence for his personality and work is doubtful: his date was at latest in the first half of the second century A.D., for he is quoted by Justin. He was also a source for Africanus, and the Syntomon seems to be near Africanus for its Sicyonian list. Thallos is also quoted as a commentator on the darkness of the Passion, so that he fulfils the requirement of being either Jewish or Christian; but since he ascribed the darkness to natural causes, it would appear that if a Christian, he was a heretic.

According to Synkellos' statement interpreted in the light of our knowledge of the authorities he mentions, either Polybius or Thallos was responsible for the notion of Makoskoleros the son of Sardanapalos. This name seems to be an error for MA: Koskoleros i.e. the 41st entry in a list. In turn, Koskoleros seems to be a variant of Konkoleros, which, according to Eusebius and the EB, was the Assyrian name of Sardanapalos. The Babylonian list in the Syntomon has a name missing after Moges and before Nabou-pallassoros, which has been replaced by Nabondinos, who should be the last king, after Baltasar who has taken the years of the Berossian Neriglissar; but once the name of Baltasar entered the list, Nabondinos had to be moved higher, or omitted. The place to which he was moved was that after Moges, who is the Sammuges

of Berossos, the historical Šamaš šum ukin, the brother of Assurbanipal (Sardanapalos); Berossos makes Sardanapalos his successor. The historical successor of Šamaš šum ukin was Kandalanu; and the appearance of Nabondinos at his place in the Syntomon list suggests that the name which originally stood there had a form like ˣKondlinos. Then ˣKondlinos the successor of Moges brother of Sardanapalos is the Koskoleros son of Sardanapalos reported for Thallos or Polybius, and Sardanapalos the successor of Sammuges in Berossos is Sardanapalos Konkoleros in Eusebius.

It would seem therefore that either Thallos or Polybius ended his Assyrian list with Kandalanu (ˣKondlinos), and he would have the true date of the next king Nabopolassar, within a few years about 625. His Assyrian list totalled 1460 years, beginning therefore about 2085. Kastor's upper terminus was 2087, and the citation of Kastor in this group of authorities may have reference to an agreement about the upper terminus. (We may note that by this time Kastor's oecumenical Model period of 1404 years has been transformed into a Sothic Great Year.)

If the Assyrian list of the Syntomon belongs to the same school of thought as "Makoskoleros", one name is missing, for Sardanapalos is the 39th, and not the 40th king. The probable omission is Atossa Semiramis 17 years, for this addition has the result, on the absolute dates of the Syntomon, of making the first year of Ninos II the same as the first year of Arbakes the Mede, which is to be expected. The mend seems to be guaranteed by the consequent microcosmic relationship of the

Assyrian duration to the macrocosm of the duration from Nimrod to Xerxes.

Thallos is quoted by Eusebius as an authority of Roman history from the fall of Troy to 01.167 or 165 = 112 or 120 B.C. The history of Rome began with the fall of Troy, so this citation does not prove that Thallos did not deal with earlier history too; and during the time indicated for his lower terminus, Ioannes Hyrcanus was recognised by the Romans as the ruler of Judea. This quotation therefore suggests that Thallos included a history of Rome in his Syriaka, at the point where Rome first acted in relation to Jewish affairs.

Thallos is also quoted for a tradition that Belos, Ogyges, and the Titans fought against Zeus, and that Ogyges when worsted fled to Tartessos, a provice of what was then Akte but was later called Attika. This rationalisation bespeaks the same mind as that which saw an eclipse in the darkness of the Passion. A further reference to Thallos says that he dated Belos 322 years before the Trojan War: this very late date for Belos may be associated with the myth that Belos was the grandfather of Andromeda, and therefore contemporary with Abas of Argos, the father of Proitos the father of Perseus. According to the Syntomon list of Argos-Mycenae (see App. V and X), Abas begins 328 years before Troy, and 71 years before Perseus. On the Assyrian list of the Syntomon, Perseus should be contemporary with Belochoos, and the upper limit of the 71 years would fall in the time of Askatades. If this last name contains the name of Hadad who was also Ba'al, a note "who was also Belos" may

have appeared in the list, like Pannias (or Mitraios?) who is also Zeus, Semiramis who is also Rhea, etc.

According to the quotations therefore Thallos was the author of a Syriaka which ended sometime after 29 A.D. and included, on the occasion of the Roman recognition of Hyrcanus, an excursus on the history of Rome from the time of Aeneas onwards; and his subject-matter was treated rationalistically is both pagan and Christian sections. If it is not putting too much weight on Synkellos' testimony to infer that either Thallos or Polybius was responsible for "Makoskoleros" as the 41st king of Assyria, we may perhaps conclude that the other was the source of the Assyrian list in the Syntomon. The author responsible for "Makoskoleros" used the Great Sothic Year for his Assyrian period, and this seems to be simpler, and so perhaps earlier, than the source of the Syntomon with his macrocosm and microcosm. But the transformation of chronography into what may be called cyclic numerology goes beyond our present subject-matter, and belongs to a world of thought which has problems that cannot be discussed here. It is perhaps sufficient to say that the creators of systems of cyclic numerology built on the foundations of arithmetical convention established by the chronographers, and that the work of Kastor, with its period of 1404 years, served as the technical vehicle of transmitting the results of chronography into the period of cyclic numerology.

δ) historiography of Assyria in the Syntomon

The accounts of Berossos and Abydenos are attempts to state the native history of Mesopotamia, so that their historiography is Mesopotamian and not Greek. The Syntomon dynasties and datings are partly a chronographic rendering of this Babylonian tradition revised by Biblical knowledge. The early Chaldaian dynasty of 216 years is all that the chronographer could admit of the ~~xxxxx~~ 33,000 or 34,000 years of Berossos for his earliest kings, for Nimrod was known from Genesis to be the first king of Babel, and his kingdom could only come into existence after the division of the human race in the generation of Peleg. The upper terminus being therefore approximately fixed, the total duration of profane Semitic history was severely limited, and the resulting preference for the comparatively short Greek chronography of Mesopotamia is seen in the return to the concept of the fall of Assyrian imperialism in 817 B.C., and the end of the dynasty in 728, in the days of "Marathios Baladam". Consequently Sardanapalos the brother of Moges, and ˣKondilinos, both disappear, and the end of the Babylonian dynasty is marked by the name of Baltasar.

ε) Media

The surviving Median lists are hybrids of Ktesias and Herodotus. The list given in the EB seems to be Kastor's, and Eusebius' Chronographia uses the list of the chronographer of the Syntomon. The list actually used by Eusebius in the Kanones is a variant of Kastor's. It is not known to whom the hybrid is due.

5) Lydia

The non-Herodotean tradition of Lydia, though very variable in detail, agrees on the names of 4 kings before Gyges and the date for the fall of Sardis in the 15th year of Kyros. The originator of these novelties is unknown.

IX. Summary history of chronographic techniques and their relations to historiographic concepts

A. Notions of time, and their relation to historiography

i. the invention of continuous time

The concept of time as a continuum, or dimension of existence, first appears in surviving Greek literature in the Oresteia of Aischylos, which was performed in 459/8 B.C. In the earlier surviving literature references to time imply another concept, so that it has been taken that the new concept arose in the second quarter of the fifth century.

ii. Concepts of time and techniques of time-reckoning

If the concept of continuous time is accompanied by the use of a continuous and reliable calendar, the problem of dating past events simple simply one of evidence; and the same is generally true, though the technical level of the evidence is lower (and that of criticism must be proportionately higher) when the concept, or a historiographic equivalent, exists without the full technical means of commensurable records.

For limited historiographic purposes the practical or administrative common-sense notion of indefinitely extended time may serve as well as the concept of continuous time. Although the two may be interchangeable for limited purposes, the conceptual difference is great; for indefinitely extended time is composed of contiguous cycles, while in continuous time the cyclic content has entirely disappeared. The former may be seen in Egypt and Mesopotamia, in existence side by side with the concept of time as a cycle of activity which recurs. Behind this notion of cyclic recurrence, each cycle making a separate time, is the very old

method of "aoristic" time reckoning. Thus the present state of our knowledge is sufficiently advanced for the tentative general outlines of the history of the concept time to emerge.

The most primitive surviving human culture is that of the Australian tribes; and among them various times of gathering particular foods are associated with the rising of certain stars. This is completely "aoristic" time reckoning, no attention being given to the question of duration, but only to the discrete events. Such methods of time reckoning are widespread among primitive peoples, and persist until just before the historical horizon in many cultures, although the technical calendarial means may advance from the use ofthe stars to that of the sun and moon. Thus the early Roman year, of ten months from March to December plus an unreckoned period, sees each"year" as a discrete unit, separated from the year before and the year after by a break in the continuity of time. Similarly, the origins of the Olympic calendar should be sought, not in any prehistoric and nevertheless advanced calendrical cycle, but in the transitional concept, halfway between discrete and continuous reckoning, of the eighth full moon after every fourth midwinter: so that the alternation of 49 and 50 month periods is a generalisation from, not a prerequisite of, the practice of the celebrations.

The early Roman year is a very clear and illuminating example of the relationship between the crude aoristic time reckoning of the Australian tribes and the fully developed notion of "times" as cyclic recurrences which is present in

probably all of the ancient civilisations. The development from food gathering to food growing techniques may perhaps be supposed to have effected the change in the notion of time: when the rising of Vega dates the beginning of gathering the eggs of the mallee hen, there is naturally no correlation that can be observed from year to year between the products of the gathering, the number of eggs and the period for which they will sustain life, and the period of visibility of the star. But agricultural processes are designed and intended to provide food until the next spring time, when vegetables may for a period serve instead of bread corn. (So even in the golden age of archaic Sparta, Alkman writes of the spring "when things are growing, butthere is not enough to eat".) The cycles of production, the periods of creative activity, thus come to be the "times", imagined still as discrete units, ordered indeed in sequence, but not in temporal relations; and the calendars of the rituals that accompany production are observational, not calculated, dependent on the real "movements" of the sun, the real phases of the moon, the real rising of the Nile, and so forth.

Such calendars, if they may so be called, are of course unexceptionably accurate for the purposes they fulfil: the agricultural cycles depend on the movements of the sun in fact, and consequently observation of the sun is an effective method of discovering the average duration of the phases of agricultural production, while the phases of the moon afford a convenient method of subdivision into smaller groups of days than observation of the sun itself. Moreover, experience will soon result in the establishment of rules whereby from the state

of the moon at, say, the spring equinox, its state at the summer solstice can be foretold, and also the phases in the intervening period, so that agricultural processes can be planned for the intervening period in terms of the phases of the moon. In some cultures consequently the moon has been the chief divinity, and in others the god of wisdom, as being the most exact, active, and creative of the forces which participate in production, and the real lunar calendars were important for ritual in the ancient civilisations as a real lunar calendar still regulates the celebrations of Easter.

For agricultural production and the techniques of its organisation discrete cyclic and recurring "times" will therefore serve excellently; but they are inadequate when the problem becomes one of organising continuous consumption by the king, the state officials, and the army. For these purposes, i.e. taxation, the distance between the "times" must be reduced to zero, and in consequence there is developed the administrative of civil calendar of contiguous cycles side by side with the ritual and productive calendar of discrete cycles. This civil calendar, as in Egypt, may have no intended direct correlation with the productive "times": its influence will however be felt in that the ritual year will come to be contiguous with the succeeding ritual year: that is, both calendars will operate on the undefined assumptions of indefinitely extending, or administrative, time. Administrative time must be simple and schematic: just as we have rationing periods - thirteen of four weeks each - side by side with our months, so the Egyptian administrative calendar consisted of 12 months each of 30 days

and five days outside the months. In Mesopotamia, perhaps because of the smaller degree of centralisation, the cyclic concept of time remained more important and the calendar more closely attached to ritual: in the new year act of the Fixing of Destinies, the underlying notion is still of separate "times". The administrative, indefinitely extended, time was related to the ritual cycle by the simple means of arbitrary intercalation of months. So too, down to as late as the second half of the second millenium, the years were not numbered at all, but named discretely from outstanding events: in Assyria, the most exact and simple method of naming discrete years (from eponymous officials) was said to be in use before the nineteenth century. In Babylonia, numbered regnal years of kings appear sporadically in the third millenium, but this does not become customary until the second half of the second millenium, when reckoning from eras (e.g. the fall of Isin) also begins to appear.

From the point of view of later historiography, ancient or modern, so long as the "times" and the intervening unreckoned periods together make years in knowable series, or the adminstrative indefinitely extended methods of time reckoning are used in contemporary documents, the determination of dates according to any system of years and eras is a matter of evidence and techniques of calculation. But when the ancient source still thought of time as an appect of creative activity, there was a tendency to suppose that in the earliest periods creative activity was greater, and so time was longer than now.

This see

This seems to emerge clearly in the history of Egypt which Herodotus knew: for it starts from the assumption that human generations consist schematically of 33⅓ years, and argues that the first, and therefore the most creative and hardworking, divine generations were each ten times that length. This kind of notion does not seem to appear in Greek chronography, probably because that discipline was founded not in adminstrative, but in dimensional time.

Greek calendrical techniques, in the use, historically, of named archontic and other years, and in the interaction of real ritual and arbitrary administrative reckonings, are at first glance so similar to the Mesopotamian as to suggest that they arose from similar circumstances. The ritual names for the months suggest that a number of customarily discrete lunar periods have been selected to form a series making a yearly cycle, and since the principle underlies all the Greek calendars, it is reasonable to suppose that it radiated from a single centre. Moreover, this may have been a cult centre of Apollo, whose cult titles Noumenios (of the new moon) and Eikadios (of the twentieth) speak of an association with a months of three decads, while his birthday on the 7th of the month may show an association with a month of four weeks. The evidence for such an inferred development is, however, meagre; Hesiod speaks of the month Lenaion, which may still in his time have been a discrete lunar period, the first moon after midwinter. The two kinds of months associated with the name of Apollo suggest that the calendrical principle was established in some place where different "times" had to be commeasured, and such a

centre might be sought in Delos as much as in Delphi.

The problems that the early Greek calendars were designed to meet were not, however, the same as those in Mesopotamia, for there was never a centralisation of power in Greece, and consequently never a single demand for administrative time. So, as the Mesopotamian calendars remain more closely attached to ritual than the Egyptian, in Greece the calendarial chaos is greater than in Mesopotamia, within as well as between the states. In view of the historical prytany system of tribal rotation in historical Athens, we need not doubt that Aristotle is in principle correct when he correlates the 12-month calendar with the 12 phratries of the "Ionian" tribes; and the provision for a rota of duties through the year is a rather different matter from the provision for the surrender of a proportion of produce to a central organisation. Both may be ultimately reducible to a number of days' labour, but the proportion of labour surrendered or lost by the individual may be much diminished when his technique of surrender is through the performance of civic duties: e.g. he may arrange to finish his ploughing earlier, or begin it later, whereas if he is to surrender a tithe of his produce, his contribution cannot be diminished by such organisational means. So in Greece both productive and administrative times were cycles of activity, and administrative time does not seem to have developed the independent notion of indefinitely extended time. Because of this consideration, it is reasonable to suppose that Greek notions of time owed no decisive element to the older civilisations,

and that, at least in the present state of our knowledge, the Greek development may be studied independently.

iii. Cyclic time in early Greek thought

The concept of time existing in the first quarter of the fifth century in Greece seems to be that of Orphism, Time as the father of all things, containing within himself, in viable but not yet independently living shape, the potentialities of all creation. This is the Chronos of which Pindar spoke in 476 B.C., and Time in this concept is not continuous or dimensional time proceeding fromthe past and flowing by uninterruptedly into the future, but Time as an aspect of creative activity. That is, just as activity is itself a generalisation from the experience of concrete actions whether simple or complex, so Orphic Time is a generalisation from the discrete durations of actions. Such time is not usable historiographically any more than we could multiply the figures of fifty 40-hour weeks to discover the total duration of the period through which the workers both worked and rested. Thus Orphic Time is at first a generalisation of discrete durations, and not a chronological concept in the modern sense in any way. Similarly, in Homer and Hesiod, time is always a particular duration, an activity seen as a single process giving rise to the several events. The typical activity - the Trojan War, the wanderings of Odysseus - is a complex interaction of various forces, among which duration and endurance are important; and this notion of activity in general represents, we may suppose, the age old experience of cooperative work and organisation in the agriculture of the anchisteia and more

primitive forms of the family, and the army organised in tribes and phratries. Such a notion of a single very complex period of interactions as the historical unit appears fully grown in Hesiod, who divides the history of the inhabited world into four separate creations of man, in a known sequence, but temporally unrelated.

If the Orphic Time is a generalisation of creative durations, the periods so generalised appear to have been of two actual kinds, both regarded as having the same internal pattern - this pattern being effectively the definitions of the recognised period. The first of these is the yearly agricultural production process, comprising four seasons: the internal rhythm was formally represented by the dance of the Horai. The second is the reproductive cycle of the anchisteia of four generations: this is seen in a later derivative, the annus mundanus attributed to "Linos" of 10,800 years, i.e. 100 anchisteiai each of four 27-year generations. The fourfold pattern also appears when the great festivals become of interstate importance (the Olympia first certainly in the early seventh century, the Pythia and Panathenaia in the sixth): the period of recurrence chosen is that of 4 years, the same pattern as that of the 4 seasons, the 4 generations, and the 4 weeks of the month which seems to appear in the date of Apollo's birthday.

Other patterns than the fourfold cycle seem to have been recognised for the internal divisions of the period or duration considered: some traces of a tradition of 3 seasons to the year, the Attic anchisteia of three generations, the three decads of

the month (Orpheus' three Moirai who are parts of the moon); and again, some suggestion of a recognition of two seasons only, the trieteric festivals every two years, and the very general custom of grandsons repeating their grandfathers' names.

We have seen some reason to believe, on the evidence of the Spartan genealogies, that the Lykourgan constitution included a change in the form of the Spartan anchisteia, that is, a conflict between various anchisteia forms in the early sixth century. Such a conflict, the recasting of the genealogies which followed its solution inside Sparta, and the development of the oikos as the basic organisational unit, would attract recognition of the historiographic possibility of using contiguous anchisteian cycles, parallel to the organisational and political development of contiguous productive and ritual cycles or years. In the surviving literature, the earliest discussion of the length of a generation in years appears in Herakleitos' comment that a man may be a grandfather at 30: this sees a natural reproductive period of 15 years as a durational unit, one time in a chain of contiguous times; while the older Hesiodic recommendation not to marry before 30 is simply a discrete duration, the date of the recommended wedding differing for every individual. Perhaps it was because of this development of the notion providing for the translation of historical cycles into the terms of years of creative cycles that later speculation credited Herakleitos with the idea of the annus mundanus, as though he had delimited historical time once and for all: Herakleitos' name is attached, with that of

Linos, to the annus of 10,800 years, and Macrobius knew of an annus of 15,000 years, i.e. a thousand of the natural generations defined by Herakleitos. But the Great Year of "Orpheus" himself is restricted to 120 years, that is, four 30-year Hexsiodic generations of an anchisteia. Thus "Orpheus" concedes to Herakleitos the possibility of measuring generations in years, but refuses to go outside the anchisteian cycle into a waste of indefinitely extended time. Moreover, the remains of the oldest Athenian chronography suggest that Herakleitos' definition of the termini of the male reproductive period - birth and reproduction of the individual - was not accepted, for in the attempt to date the "generation" of Peisistratos, the beginning istaken at the birth of his eldest son, so that the generation is defined by the events of reproduction and death. Thus, while Herakleitos adopts a duration and termini from nature, the old Attic chronographer intendes a social definition of an individual's biography: no man counted in the records of his oikos unless his son, real or adopted, was present to continue it, so that unitl his heir was born no man had full social status.

The development of the notion of continuous time does not therefore seem to be due to Herakleitos, although his comment on genealogical time may have stimulated thought. The probable history of the development is suggested by the contrast between Orphic Time as the generalisation of creative durations, and the introduction of the new concept by Aischylos of Time "sleeping with" Klytaimnestra, and measuring not daily labour only, but also nightly rest, that is, Time which includes

the periods of rest and inertia in a process of interaction. The notion of rest after a chronos of labour in this world was much emphasized in Orphic thought; and this notion should be considered not only in relation to the great increase in serf and slave (i.e. more exploitable) labour in the seventh and sixth centuries, but, since Orphism was by no means confined to the serfs and slaves, also to the engagement of free labour in new production processes. For the farmer, periods of work and idleness are externally imposed by the seasons; the free craftsman learns by experience the necessary rhythm of effort and idleness which must occupy his whole life. Furthermore, when the community, in which the class of craftsmen is born, is of the archaic Greek type, organised in tribal and anchisteian institutions, the existence of an element in the population whose rhythm of labour and rest in production (and not only in civic duties) is self-disciplined, means that the rhythm of life in the whole community becomes a complex interaction instead of a simple pattern. The rhythm of the craft processes thus introduces into production the highly organised principle of selfdiscipline already present in civic duties, and emphasizes in turn the importance of rhythm in public affairs. The notion of periods of rest in public organisational matters is a phenomenon first appearing in the sixth century, as in the story of the ten-year self-imposed exile of Solon.

The notion of necessary rest first appears in Orphic thought as a concept independent of the generalisation of creative durations, and is connected with the timeless future after death; only when a man's time is completed can he be judged to have

attained certain eudaimonia, an indisputable achievement of a good moira. The notion of rest thus approaches that of time through the intermediation of Moira, the portion of work and effort, and the portion of produce and effectiveness; the total effect of a man's life can only be judged when his creative activity has ceased, and this definition is put into the mouth of Solon during his self-imposed exile. Here there seems to be the emergent notion that a moira of effort in commensurable with a moira of rest: which Orphic thought generalised into the expectation of a life of rest beyond the bounds of the life of effort. That is to say, the rhythm of work and rest is treated as an aspect of the manifold problem of commensurability on which the development of Greek thought turned in the sixth century, from the abstract coin-standard of Himera in the first decades, through the work of Pythagoras, to the simile of Herakleitos: Fire is exchnged for all things, as gold for goods, and goods for gold. In this development of Time as a measure of commensurability seem to lie the roots of Aristotle's view that Time presupposes Number; and Avicenna's definition of time as the common measure of different movements.

In the rhythm of production therefore it was supposed that a portion of rest was determined by the portion of effort that earned it, and these two portions must have a common measure. The measure invented was continuous or dimensional time, which provided a common standard to measure amounts of work and rest. In historiography, creative activity and rest are represented by the inception of a period and its duration, the creation of a

social order and its maintenance. Pre-chronographic mythic narrative is concerned with creative activity, and hardly with duration at all: this is especially clear in those Peloponnesian archaic genealogies where only the first named generation of an anchisteia is remembered. It is therefore necessary to trace a special aspect of the development of the notion of continuous time, that is, the development from mythic to chronographic historiographic method.

iv. Inception and duration of periods in historiography

So far as our rather elusive evidence goes, it seems probable that the notion of timed rest took about a century to develope, from the time of Solon to that of Aischylos. Of course, its roots are in much older experience, but here we are discussing the formal embodiment of that experience in a disciplined concept. During the sixth century there were many political and social changes, so that the maintenance of a social order came to be seen as being as effortful as its creation. In Athenian history this notion is particularly clearly at work: the state and its constitution were established by Theseus in the heroic age, the creative period par excellenee, and thenceforward measures are taken to maintain what he founded, which sometimes failed, but in decisive moments succeeded: Solon overcame the dangers to the social order arising from the concetration of wealth, Kleisthenes those arising from the concentration of power. The constitutional mechanics are simply mechanics, subserving the larger aim. We may perhaps suppose that the decisive experience in formulating this historiographic view was the

success of Athenian effort in maintaining their freedom against Persian attack, and the oldest document surviving which is based on the notion of effortful maintenance is the extract from the "annotated annals" in Herodotus, which tells of the inception and maintenance of the democracy, and begins, not with the first result of effort in the expulsion of Hippias, but with the inception of effort in the murder of Hipparchos.

It wouldthus appear that the notion of timed rest first arose in association with the sixth-century developments in public affairs, which brought the concept of effortful duration into the same category of forces as the concept of creative activity. In this development, it may be supposed, the detailed elaboration of the internal duration and endurance of discrete periods in the Homeric siege of Troy and wanderings of Odysseus were taken as models of the effort of maintenance rather than of the effort of creation: this may be one element in the great popularixty and state employment of the Homeric poems in the sixth century. So also in Hesiod, it is not difficult to transmute the notion of discrete creations of man into a consideration of the durational effort expended in each case. Since the transmutation is easy (and indeed for the modern student nurtured on the notion of continuous time, the assumption of the importance of duration obviates the need for any transmutation at all, and leads to a reading back of our assumptions into the minds of Homer and Hesiod), it may be thought that the century from Solon to Aischylos is far too long a period to allow for the [illegible] development from timed

rest as a notion in itself to the integration of that notion in the concept of continuous time. But since the development began in association with a concept of time as the generalisation of durations of creative activity, the intellectual problem was not one of simple addition, the addition of more duration to durations already established. It involved nothing less than the complete remodelling of the methods of mythic historiography, and this was a matter of great labour, because the new results ran counter to the accepted (i.e. "known") historical facts which formed the title-deeds of the various social organisations.

Mythic historiography is concerned with creative activity and not with duration, because the duration of the social order is the concern of custom and ritual established by creative activity. So once the institution, for example, of the Apatouria is described, there is nothing more to be said about it, except "and so it is until our day". Consequently the notion of the effort of maintenance cannot arise as a rival to the effort of creative activity until the customary social order is disrupted, and the effort to maintain it becomes as great as the effort to change it would need to be. Moreover, the effort of maintenance must be comparable in result to the effort of creative activity, that is, it must, in some overridingly important aspect, be successful: in modern historiographic terms, forces must be at work over a sufficiently large area, and in sufficient equilibrium, for the immediately observable results to vary from place to place within the area.

This was not the state of affiars in Greece before the sixth

century. Then, in particular, Athens and Sparta succeed in maintaining tribal institutions within the ruling tribes through the use of slaves and serfs, and avoiding the political depression of a section of their born citizens, although the menace of such a possibility was great, at least in Athens just before Solon's time. In both cases, the tribal system had to be remodelled, on the basis of the oikos instead of larger units; in Sparta this appears from the genealogies and the traditions of Lykourgos; in Athens the oikos in its physical aspect, the house standing on geographically definable land, becomes the unit of organisation in the territorial tribes of Kleisthenes.

But the anchisteia of interrelated oikoi had existed for some time before these constitutional remodellings, which could therefore be regarded, if not intended, as simple mechanisms for maintaining what already existed. As a part of this same attitude of mind, the notion of the previous existance is transmuted into a retrodating of the remodelling. This is reasonably plain in Sparta, where the traditions still preserve traces of the historical facts about "Lykourgos"; and it may be strongly suspected in Athens, where we should expect the Ionian tribes to be instituted after the arrival of the Ionians under Melanthos, and not before as stated in the traditions.

Thus it would appear in the history of Greek thought that the notions of time prevailing at any epoch are an aspect of the current notions of process; and this historiogrphic methods of handling process are based on current experience of the nature of social process, so that changes in social process as experienced lead to a review of historical process in the light

of the new knowledge contemporarily gained. Mythic history is uncontrolled by available contemporary documents, and therefore fully open to the effects of such reviews; while written history is to some extent fixed. As a result, when conflicting views of social process are applied to historical records, the events will survive although their evaluations may differ widely; in mythic historiography, since the events are seen as arising out of the process as envisaged, the view of the process determines the description of the facts, and their survival.

It would appear therefore that the Greeks of the early fifth century concluded that effortful maintenance was as important as creative effort in public affairs, and this agreed with their conclusions from private experience that a moira of effort must have a compensating moira of rest. It remains to be further noted that the supposed maintenance of their social order was due to the fact that they discovered a means of placing its cost on the serfs and slaves; consequently the threat to the social order contained in "Aristagorism" and the freeing of the Killyrioi at Syracuse resulted in the active determination to maintain the social order at all costs. The decade of the Ionian revolt, the Syracusan upheaval, and Marathon, is thus decisive in Greek social experience, for as Solon had set the limits, so to speak, up to which the market economy might disrupt society, so the events of that decade set this limits within which the planned organisation of society might override the market. The maintenance within each community of the equilibrium thus achieved becomes thenceforward the political aim; and the concept of continuous

time is an aspect of the view of what social process ought to be.

It is probably therefore to the first half of the fifth century that we should ascribe the general pervasion of the historiographic view that the heroic age was the creative period par excellence, and the archaic period a time of maintenance. Sparta, having no heroic age, was forced to retain some semblance of archaic history; Athens more successfully almost achieves a pure duration to occupy her archaic period. Consequently, the Spartan traditions of events are placed at points on contiguous anchisteian cycles, and the notion of continuity is incarnated in the line of filial succession among the Agiadai. In Athens, the Medontid archonship is nothing but "an empty list of names" wholly barren of cyclic or eventful content. Since this is likely to be a wholly untrue account of Athenian development, it is comprehensible that the recasting of historiographic method involved much time and labour.

B. Hellanikos: the Chronographic Model and the Cosmogony.

It is natural to suppose that the development of determination to maintain the social order led to enquiry into the means by which it had been maintained in the past, and in the late sixth and early fifth centuries a number of genealogists, such as Hekataios, Akousilaos, and Pherekydes, collected a vast amount of historical data. By about the middle of the fifth century Hellanikos apparently reaches the limit of genealogical remains, and proceeds to the collection of non-genealogical successions, such as the priestesses of Argos, and the victors in the Spartan Karneia. Since his work also touched upon the eastern civilisations, we may suppose he had heard of their capacity to

reckon historical time in years. The problem of commensuration of generations also therefore included for him the commensuration of generations with lists of successive victors: in brief, Greek history now became unmanageable without some system of stating all the successions in terms of years. It appears that, faced with this problem, Hellanikos turned to the treatment of commensurability in Pythagorean mathematics, and adopting the once discrete cyclic year as his monadic unit, selected the Spartan and Athenian lists (already, we may suppose, the most reviewed in the light of the new historiographic method) and stated their duration in terms of the equation 39 x 9 = 27 x 13 years. He thus established the principle that any simple duration in which there were two independent series of names could be stated in terms of years, for the sum of years must be a common multiple of the two numbers of names. But where the lists were fluid, as the heroic genealogies always are, dating by simple extrapolation from the Model was a matter of selecting the list to be used, a specific historiographic problem in each case. Moreover since by convention the heroic age remained the period of creative activity, the narratives about it could be continually reused and recast to provide means of discussing the nature of social process; while the persons and events of the sixth century were generally too well known to the living memory existing in the time of the first historians for the existence of social process in their time to be denied. The creation of the Chronographic Model by Hellanikos therefore left all the problems of dating process, as distinct from simple duration, to further discussion, so that

in practice the application of the arithmetic to history assumed that the concern of history was in the periods of maintenance and not in the periods of creative activity. So while Hellanikos the mythographer had been able to discuss the ethnogenesis of the Persians, Herodotus the historian can only note the coming into existence of the nation as a simple event.

The suggested attribution of the Chronographic Model to Hellanikos raises the question of the relationship of this invention to the reported cosmogony of Hieronymos and Hellanikos. This document appears to have alleged that in the beginning there was water and slime; from the combination of earth and water, that is, apparently, from the slime, there came into being Chronos who is also Herakles. This power united with Ananke, who is also Adrasteia, and created Aither, Chaos, and Erebos; among them there was an egg, out of which came Zeus who ordered all things. This account of creative process has some noteworthy characteristics: (1) primordial matter is liquid and solid, not gaseous: "intelligent Aither" is a special form of matter, created later; (2) Chronos who is also Herakles is clearly later than the invention of the chronographic model, wherein the Herakleid male descent line of the Agiadai plays an important part: by founding it, Herakles initiated a principle which is here held to be one of the dominant elements of process, so that the "real" Herakles is Chronos; (3) the other conjunct dominant principle is inescapable necessity, or causality; (4) the concept of space is replaced by the sum of Aither, Chaos, and Erebos; (5) in space so defined grows the egg from which Zeus is born, the

orderer of the universe.

The identification of space with space-filling matter (including the aither of intelligence) contrives an avoidance of the question at issue between Parmenides and his opponents - a discussion which, by the way, must have greatly assisted the development of Orphic thought in opposition to the materialists, for, since the Orphics apparently regarded all forms of power, including the power of movement, as divinity, and their gods like their principles of time and causality were corporeal, they were able to discuss forces and their relationships without encountering the difficulties of mental technique encountered by the fifth-century materialists.

The interest of this cosmogony for our present purposes however is the replacement of the older Nyx by Chronos Herakles, for the cosmogonic Nyx seems to represent the notion of a primordial timeless inertia that preceded the creative process. In the later cosmogony primordial matter is initially endowed with the powers of movement and combination, but the cosmogonist only begins his narrative when the principles of time and causality are applied to the previously timeless and ineffective movement: here are the first beginnings of the notion of the difference between the sensible and the intelligible universe, although the process is described as though the universe experienced a process of acquiring intelligibility, instead of the human experience of acquiring mental techniques. This is in accord with Orphic thought, which, paradoxically, saw Time as the father of all worldly existence, and the personalities of men as eternal: human nature experienced no historical

development.

Whether the cosmogony of Hieronymos and Hellanikos was composed by Hellanikos the mythographer or not, it clearly bears the impress of the mind that invented the Chronographic Model, and so probably belongs to the same generation.. In fact, it is in a sense the other half of the Chronographic Model, for, as that describes pure duration, so the cosmogony describes pure process. If both are the work of one man, then it is fair to conclude that the exclusion of periods of creative process from the Model was deliberate; if they are the work of separate authors, then the exclusion of periods of creation from the Model was recognised by Hellanikos' contemporaries or successors.

C. The discipline of chronography. i. Herodotean historiography

In his chronography, Herodotus used the principle of the Chronographic Model, but not the Model itself, and he fairly consistently excludes from his chronographic archaeology any consideration of creative process. In this, it seems certain, he was in accord with his times, for even in his seventh and sixth century narratives he contrives, often but not quite exclusively, so to select his material as to represent process by simple event or characteristic anecdote. He is thus not only the father of history, but also of historical positivism: a methodology which Aristotle characterised as less serious and philosophic than that of poetry.

His historiographic subjects are of two kinds, events and social entities or organisms already constituted. He agrees with

Pindar that custom rules all: that the maintenance, not the inception, of a social order is important. In his discussion of the coming into being of various areas of Hellenic culture he suggests an evolutionary development, which is in accordance with the notion of continuity through direct oikos descent; and he ascribes the achievement of Hellenic selfconsciousness to the individual work of Homer and Hesiod.

Herodotus thus excludes from his subject matter any instances of process and change per saltum: consequently any instance of his silence about such a development is not to be taken as evidence that such a process did not occur. In such matters indeed, the records of other less rigorous historians, who did not exclude discussion of processes such as ethnogenesis, are to be regarded, in principle, as more informative.

ii. Historiography and chronography c424-369 B.C.

The chief documents for this period are Thucydides, Ktesias, the remaining work of Hippias of Elis, the original of the Attic chronography of the Excerpta Barbari, and the chronographic system of four and one-third generations of annual archons upto 514 B.C. - at first sight a somewhat miscellaneous aggregate. Fortunately however our interest here in Thucydides and Ktesias is limited to the relationship between their historiographic concepts and their employment of chronographic techniques.

Ktesias in his attack on Herodotus and Hellanikos was, we may be sure, attacking a school of thought, and conformably with this he contrives a list of "Median" kings which contains, perhaps,

all the characteristics of mythic historiography, and proceeds to a chronographic technique of dating them, thus combining two historiographic methods which Hellanikos and Herodotus had carefully separated. The absence of a critical sense in Ktesias is thus a part, and an essential part, of his historiographic approach; as a result, where his sources were good, as in the "Median" case, he preserves information about formative processes which could not otherwise have survived positivist treatment. It was no doubt his insistence on the "mythic" element in historiography which caused such writers as Diodoros to prefer his account to that, for instance, of Berossos for Mesopotamian history.

Thucydides by contrast develops the Herodotean historiographic concepts, and is able to enlarge them considerably. The development of the third of a generation in chronographic technique is a considerable advance in historical arithmetic, for it frees the chronographer from the necessity of dependence on actual genealogies, and so enables him to treat of successions of events for which a single genealogy was not available. Consequently, given the approximate temporal relations of the events to be treated, a chronographic system could be proposed which could combine apparent precision with a greater degree of accuracy than was possible in the preceding generation of historical writing. To a certain extent also, the independence of stual genealogies reopened the possibility of including more in the historiographic scope than linear evolutionary development, and while Ktesias returned to the full mythic historiography, Thucydides announdes an attmept to write a history of a period

of intense interaction without recourse to mythic concepts of process.

The purely chronographic documents of this period also show attempts to reconstitute the full concept of the existence of process in history. Hippias' Olympic reckonings establish the era at the point where the general tradition, in its very various forms, placed the completion of theprocess of forming Hellenic nationality; and the establishment of Olympiad cyclic periods as the normal technique of historical dating shows the persistence of the underlying concept of cyclic time - as indeed do the various attempts at calendrical reform. The original of the Attic list in the Excerpta Barbari has in common with Ktesias the belief that generations of simple duration creative process could be dated as precisely as generations of simple duration, and probably the same Atthidographic school was responsible for the definition of the period of the archaic annual archons as comprising four and one-third generations. It is much to be hoped that further enquiry will lead to a tentative identification of the source or sources.

It wouldthus appear that in Greece the administrative concept of indefinitely extending time came into historiographic use after that of time as pure duration. In the third quarter of the fifth century, such time is implied by Herodotus, though in fact he has no explicit year reckonings before Herakles in Greek history except - after his visit to Egypt and encounter with administrative time there - in giving a date to the career of Dionysus. The historiographic development thus seems to belong to the last third of the fifth century, and the Thucydidean

choice of subject andtreatment are consistent with his announcement of an attempt to treat a period of creative process with exact dating and without mythic concepts of process, which would need revaluing when the notion of process changed. His work was in fact to last for ever, because it contained only such material as would not need to be changed. Thucydides was thus very well aware of the problems underlying the work of Hellanikos and Herodotus, and saw from the evidence of contemporary events that a methodological solution must be found. Ktesias and the Atthidographers face the same problem less philosophically, ignoring the conceptual difficulties of the mid fifth-century, and thereby bringing into full employment the commonsense notion of indefinitely extended time.

iii. The results of the fall of Sparta in 369

The surviving chronographic documents of the fourth century are few and fragmentary, and the collection and interpretation will require considerable labour. Here it is only to be noted that Ephoros and Theopompos are both quoted for views on the date and origins of Pheidon of Argos, while their master Isokrates, along with other Attic orators, is quoted for durations of the Messenian subjection to Sparta. Ephoros is also quoted for an eleventh century date for the Return, which cannot be derived from the Chronographic Model.

It seems therefore that one of the important elements in fourth century chronography and historiography was the intellectual shock of the fall of Sparta. The Chronographic Model was now seen to be based on a duration which no longer endured: both

Sparta and Athens had fallen. The historical profession, as represented by Ephoros and Theopompos, turned to the possibility of creating a historiography based on the continuity of Sparta's enemies. Messenia was hardly serviceable because of the break in her history, and the difficulties of compiling a history of Dorian Argos were in principle probably overriden by two other considerations: that her genealogical records went very far back into the mythical period, and her archaic genealogies were associated with the rising Macedonian monarchy. Consequently the establishment of the successions of Temenid generations, and the dating of Pheidon assumed importance. Theopompos is quoted for the genealogy, which bears marks of an anchisteian origin and use of cyclic time; Ephoros is the authority for a date and the naming of Pheidon as the first coiner of money. This characterisation is consistent with Ephoran interest in inventions, and his heurematics are an alternative concept to that of social and historical process.

The Ephoran association of Pheidon with Corinth may have been due to an attempt to link the rather inchoate history of Argos to that of the more formal Corinthian kinglist, based, perhaps, on the existence, or reputed existence, of a Temenid phratry in Corinth. The story of Pheidon, Melissos, Aktaion, and Archias gains much in point if Melissos was imagined as an Argive Temenid who sought hospitality among Corinthian kinsmen only to have his son murdered by a prominent Corinthian Temenid: the story will then belong to a group in which the ties of collateral kinship or hospitality are represented as being outraged. This group of stories represents, we may suppose.

that period in Greek development when to be, for example, a Temenid who lived in Corinth became less important than to be a Corinthian who happened to have reputed collateral kinsmen elsewhere, that is, when the territorial integrity and coherence of communities began to take precedence over the places of their members in the general web of Hellenic kinship. In the surviving narratives of archaic history, the starting point of the new development is ascribed to the Spartan attack on Messenia, seen as the working out of the fratricidal mania of the descendants of Oidipous. The first Messenian war seems to have been generally dated by the fourth century authorities to the first half of the eighth century, so that the Ephoran Pheidon would be contemporary with its end, or with the period of peace; his design to subdue Corinth thus belongs to the same general period as the Spartan subjugation of Messenia. This was, clearly, an arguable historiographic view, although based on generalisations which could only arise in retrospective views of the archaic period, and which were therefore not evidence for the contemporary weighing of motives and characteristics.

If is was assumed that the archaic duration of Corinth was contemporary with the duration of the Chronographic Model, and ended about 753 B.C. , the generation count of the the Corinthian kings, being only nine, would place the accession of Aletes a complete generation later than the Return of the Chronographic Model even if the generations were given the same value in years. But one of the dates for the Return attributed to Ephoros is 1089 B.C., 27 x 2 (or 36 x 1½) years after the

Model Return, and it seems likely that Ephoros took the synchronous history of Corinth and Athens as the datum for his archaic period, placed the Return in the generation of Eurysthenes at Sparta (a generation later than the Chronographic Model), and dated the important phase of the Return, the accession of Aletes, to 1089. His date for Pheidon in 748 is 39 x 1⅔ generations before 683, the beginning of the Athenian annual archons, or 39 x 6 years before 514. His figures thus seem to represent an attempt to use Argos instead of Sparta, and to elaborate the historiography of the archaic period by emphasizing the history of Corinth.

iv. Hellenistic chronography and chronology

The direct quotations from Eratosthenes in our sources include the list of Greek eras and a translation from Egyptian archives. But we have seen that the chronographies attributable to the Hellenistic school require as their mathematical foundation a particular plotting of points in time (in terms of monadic years) which can hardly be attributed to anyone other than Eratosthenes. The intent and effect of this scheme seems to have been to make every year chronographically available, within the conventions of nine columns of "successions" of types of events and persons; and thus make the Greek past comparable with the naturalistic or chronographic pasts of their alien subjects. The conventions of the successions however for the most part kept Greek historiographic thought at much the samegeneral level as before: an immense amount of detailed construction took place, but no attempt can be traced to periodise historical stages of development. Instead, we have

some evidence of large "times" used as calculating devices to establish upper termini: the 780 = 39 x 20 years from the fall of Troy to that of Athens may serve as an example. This seems to imply that the Hellenistic school saw the whole development of Greece from Troy to the end of the fifth century as a single period of historiographic chronography: that is, it was assumed that a historical period should be equivalent to a mathematical period. This seems to be the beginning of a return to cyclic time.

Apollodoros accepted the mathematical structure proposed by Eratosthenes, and used it as a basis for detailed historiogrphic work. He uses time within the period established by Eratosthenes to make dates constructed according to the succession of thinkers and writers. But outside the Eratosthenic period (from Troy onwards) he is only credited with an extension of chronography back to the first human ancestor of Herakles, Perseus and his contemporary Dionysus. His name is once mentioned as an authority for Assyrian history; and if he dealt with this at all, the date of Perseus would be important.

Sosikrates is quoted for some dates in seventh and sixth century Greek history. These imply a complete recasting of the Herodotean narrative, and unfortunately came to be accepted as the vulgate, which term means in this case that other narratives are judged by their adherence to Sosikrates' chronography. The proper place for his dates however is in a study of Hellenistic methods of historiography.

The contribution of the eastern cultures (as distinct from Egypt) to the historiographic methods of this period is

represented by the name of Berossos. It seems to have had little effect.

v. Chronography in the early Roman period

Since Kastor made a chronography of the Alban and Roman kings, he may properly be included in the early Roman period, which also contains the sources used by the first Christian chronographers, among them, pre-eminently, the source of the Asiatic chronography of the Syntomon. The aim of Kastor's chronography has already been discussed: the establishment of cultural equality between Europe and Asia. The form which this takes is of considerable interest. The chronographic period, in the sense perhaps that it was not furnished with contemporary documents, is held to end when the Athenian list of annual archons begins; and this historiographic period is made equivalent, after the manner of Eratosthenes, to a mathematical period, in this instance of 1404 years, the LCM of the three generation-lengths of 39, 36, and 27 years. Within this, other periods are noted, e.g. 780 years from the beginning of Kekrops to the first Olympiad. The interaction of Europe and Asia is emphasized by the Assyrian list, and, for the archaic period, by the list of thalassocracies. An important technical detail in Kastor's work on the archaic period is that he ignores the tradition of Aristodemos' reign in Sparta, and consequently is enabled to use the long list of Spartan Agiads, which he may have received from Rhodian tradition.

Kastor's view of the nature of chronographic time is illuminated not only by his choice of the lower terminus, but

also by his introduction to the history of Assyria. Belos was king of Assyria, and in his time the Titans warred against Zeus. After his death Belos was accounted a god: and Kastor refuses to give any years to his time on earth. Thus Kastor distinguishes between creative process and historical development, and refuses to date the former. In this, in his rejection of the Berossian learning, in his common upper date for Europe and Asia, Kastor maintains the fifth-century tradition of chronographic method and its limitations, and also belongs to that historiographic school which knew three periods of history: the obscure, the mythic, and the human.

D. The new concepts of cyclic and stadial time

After Kastor's time, chronography changes its chracter, It remains a creative discipline, it would seem, for some two centuries, but the notion of time on which it rests is altered. The numerological period of 1460 years for Assyria is indicative of the change: there is a return to the notion of cyclic time. In the conditions of the early Roman centuries, when the literature of the ancient world was still almost intact, and consequently the philosophical achievements of preceding centuries were available, it is not possible to interpret the return to cyclic time as a relapse into older and less exacting modes of thought. Moreover, a cycle of 1460 years, or the period within a period of the Asiatic dynasties of the Syntomon, appears to the imagination as a very different thing from the cycle of the year, the Olympiad, or the anchisteia, and when we remember the importance of the notion of the destruction

of the world in contemporary speculations about ekpyrosis among the pagans, and the expectations of a first or second coming of a new creator in the rising religions of the time, the difference between the annus mundanus and associated notions, and the old yearly Fixing of Destinies and similar rituals, is seen to consist largely in this: that the old cycle of production and reproduction has been replaced by a notion more abstractly social and intellectual; that the total known historical experience of man is by thistime so elaborate and saturated that a complete remodelling of the universe of thought and work is approaching. This notion is expressed in so many different ways bout the time of the establishment of the Roman empire, that it is plain the conviction was widespread and commanded agreement in most of the literate and many of the illiterate elements of the Mediterranean communities.

At this time, the combined are of Roman administration and Hellenistic culture was such that it included communities at all stages of organisation which can be based on agriculture, and even the most sophisticated sections of the population still possessed at least traditional ties with forms of kinship or tribal organisation. We have therefore to allow for not merely the coexistence but also the interaction of very various notions and uses of time. We have seen how even in Greek and Roman thought there is a constant reminiscence of discrete times underlying concepts of both dimensional and administrative time; and for large proportions of the peasant population in all the Mediterranean communities these discrete times would still be the only notion of time. In such elementary practice, time differs

from the three dimensions of space, or the experience of sequence, in not being directly perceptible by muscular activity; the notion is a mental tool, serving to regulate the actions which men perform in their productive interaction with nature. Similarly, administrative time is a mental tool which serves to regulate the actions of the administrator in his social interaction with the rest of the community, while continuous or dimensionaltime regulates the interactions within the community at large. Thus in each case, the forces, whose interactions the mental equipment helps to control, are in practice known, and their relationships and interactions, it is assumed, may be kept stable by a certain customary expenditure of effort. Time is thus the standard by which current work is measured before the resulting produce is available as a materialmeasure, or when (as in the case of administrative or dimensional time) the product does not provide a material measure. It is a natural consequence that in the primitve discrete years, when there is no work, there is also no time reckongd, while the administrators' activity is indefinitely extended and the communal expenditure of effort in social life is continuous. But both extension and continuity are aspects of the work which relates known forces, and in ancient thought just as time is absent when productive work is non-existent, so also time is absent when the forces are unknown, or their relations uncontrolled. Since creative process consists in the birth of new forces, or the elemental social remodelling of their relationships, it followed that, historiographically, creative process was undated. And about

the time of the establishment of the Roman empire it also followed that, since new forces were being born, and the relations of old forces were being remodelled, time was coming to an end. The very general experience of intense social change thus seized upon traditional formulations to express the new knowledge, and the interpretations given to the new knowledge are two, and mutually exclusive. The pagans turn to the old notion of cyclic time, now envisaged on the grand scale, and capable of containing all the existing knowledge of ancient empires overthrown: the learned vicarious experience, that is to say, of successive imperialsims is in full accord with the notions of ekpyrosis affecting the cosmos at large, and history is concerned with tracing the shift of power from one centre to another, and discussing its durations. The Christians on the other hand, concerned with aspiration as much as with experience, and limiting their definition of true history to the infallible records of the chosen people, insisted, in the face of the established learning of the day, on the conception of stages in the history and progress of man. So in our Bibles, instead of the chronography of philosophically contemporary imperialisms, we have dates calculated by Archbishop Ussher, on the basis of the belief that the world would last 6000 years, 2000 before the Law, 2000 under it, and 2000 years under the Messiah. Chronography was thus only one among several ancient sciences, founded on the principle that figures cannot lie, that failed to stem the rise of a new interpretation of life which had its own comprehensive view of the proper relation between

the facts of the universe and the speculations of its inhabitants.

APPENDIX I

Spartan Chronography

1. Sources

The sources for Spartan chronography are:

1) lists of kings: Apollodoros through Diodoros in Eusebius' Chronographia, Kanones, Series Regum (A and J), and the Chronographeion Syntomon, with slight variations. The problem here is to ascertain the precise text of Apollodoros.

an unknown source in the Excerpta Barbari

an undated list in Pausanias, invaluable for the narrative.

2) a list of eras from Eratosthenes and Apollodoros, in Clement, Tatian, Synkellos, and from Porphyrius in Eusebius' Chronographia

3) various dates for events and for Lykourgos reported by Eusebius and other late writers, and dates for the era of Messenian subjection from the fourth century sources downwards, including dates for the Messenian wars given by Pausanias.

A. The Text of Apollodoros

2. The archonship of Peisistratos 669 B.C.

Apollodoros gave his dates in terms of Athenian archons, and the dates in our sources which use these terms, some of which may be due to Apollodoros, are: Pausanias' dates for the Messenian Wars (see below), and for the Battle of Hysiai in the archonship of Peisistratos, Ol.27.4 = 669 B.C.

The Battle of Hysiai in 669 B.C. is in the 108th year of the Olympiads, and so balances Lykourgos in the 108th year before Ol.1 according to Jerome. But Apollodoros' Lykourgos was 108 full years before Ol.1, so it is a question whether Hysiai should not rather be placed in 668, the year of the Gymnopaidia (Jerome), which is 108 years before the marriage of Timonassa of Argos to Peisistratos the tyrant. We thus

seem to have the series:

1. Lykourgos to 01.1: 108 years

2. 01.1 to Hysiai: 108 years

3. Hysiai to Timonassa: 108 years.

3. Dates for the first Messenian War or the era of Messenian subjection.

i. Orosius: 772
Isokrates and Deinarchos: 769
Lykourgos the orator: 869, which identifies the era with the regency of Lykourgos
(Hippias of Elis: 736-16: see chapter III Bi 2(c).)

ii. The Eusebian dates are conflicting, and may be summarised thus:

Armenian:	beginning of the war:	01.9.3	= Aisimedes 1st yr.
	capture of Messenia	11.4	= .. 10th
Jerome:	beginning of the twenty years' war:	01.8.3	= Charops 8th yr
		9.1	= .. 10th
	capture of Messenia:	10.1	= Aisimedes 4th
		11.2	= .. 9th
		11.3	= 10th
		11.4	= Kleidikos 1st

iii. Pausanias gives both Olympiads and archontic years:

first war begins:	01.9.2	= Aisimedes 5th
ends	14.1	= Hippomenes 4th
second war begins	23.4	= Tlesias
ends	28.1	= Autosthenes

Both Eusebius and Pausanias are confused, but may be used to elucidate on another on the following points:

a) Pausanias' Olympiads give 18 years for the duration of the second war, but his narrative only covers 14 years (the year of the revolt plus 13 years of war - the year of revolt has not

been reckoned by Cadoux, JHS 68 (1948) p.); that is, he has one Olympiad too many. Autosthenes the archon is not otherwise known; Tlesias is generally identified with the Lysia.. of the Marmor Parium, who (on inclusive reckoning) belongs to the year 681 B.C. = 01.24.4. It thus appears that the upper Olympic date for the 2nd war is one Olympiad too early.

2) the duration of the first war: Jerome's "twenty-years' war" seems to last at most 13 years, and at least 5. Here Pausanias' narrative is helpful, for he asserts that in the 5th year of the war, after a battle with Theopompos and Polydoros, the Messenians withdrew to Ithome; while in the 13th year the Messenian king Euphaes died. Thus, in this narrative, Messenia is taken except for Ithome in the 5th year of the war.

3) equations of Olympic and archontic years: According to all the chronographers' reckonings, the annual archons at Athens began in 683 B.C., and were preceded by 70 years of decennial archons beginning with Charops. The last year of these decennial archons was thus 684, and they began in 753 B.C. We may therefore translate the archontic years into years B.C. independently of the Olympiads, with the following results:

1) the war begins:	Jerome:	8th Charops = 746:	01.8.3 = 746
		10th .. = 744:	9.1 = 744
	Armenian:	1st Aisimedes 743:	9.3 = 742
	Pausanias:	5th Aisimedes 739:	9.2 = 743

Here Jerome's dates tally; the Armenian dates differ by one year, due to the fact that his Olympic era is placed one year earlier than Jerome's, but Charops is placed at the same year, anno Abr. 1264, so that Aisimedes' 1st is equated with 01.9.3. The Pausanian dates show the same discrepancy of one complete

Olympiad as in his second war.

2) Messenia taken: Jerome: 4th Aisimedes=740: = 01. 10.1
9th .. 735: = 11.2
10th .. 734: = 11.3
1st Kleidikos 733: = 11.4
Armenian: 10th Aisimedes 734: 01. 11.4 = 733
Pausanias: 5th year of war (=
9th Aisimedes=735: 01. 10.2 = 739)

3) war ends: Pausanias: 4th Hippomenes 720: 01. 14.1 = 724

The narrative of Pausanias, in which the 5th year of the war is crucial, suggests that the dates above fall into the following groups:

(a) war begins 744 (J), Messenia taken 740 (J) in the 5th year
(b) war begins 739 (P.) Messenia taken 735 (J) in the 5th year, ends 720 (P)
(c) war begins 743 (A,P), ends 724 (P) in the 20th year.

Thus the dates 746 for the beginning ofthe war (J), 734 and 733 for the capture (J & A) either belong to another narrative or are errors in the Kanones. Probably we have only two variants, one placing the beginning of the war in 739, the other either in 744 or 743, as the two sources used by both Pausanias and Eusebius.

4. Dates for the first Messenian War and the two contemporary Spartan kings

According to the Pausanian narrative, Theopompos and Polydoros were the Spartan kings in command at the battle of the fifth year of the war. Polydoros was the successor of Alkamenes, who was still alive at the beginning of the war, so that the battle in the fifth year marks the first appearance of Polydoros. Theopompos was named by Tyrtaios as having taken Messenia: Pausanias interprets this as meaning that Theopompos was still alive in the 20th year ofthe war, but it is obvious that the Eusebian source which stressed the battle of the 5th

year may have interpreted Tyrtaios as referring to that battle, and not to the subsequent work of containing the Messenians at Ithome. Consequently a chronographer working on the same traditions as give the basis for Pausanias' narrative would make Alkamenes live until at least the 1st year of the war, and make both Polydoros (imagined as at the beginning of his reign) and Theopompos (imagined either at the end of his reign, or in the prime of life) alive in the 5th year of the war. We may therefore examine the figures of the war and of the Apollodoran kinglist, to see whether any connection between them suggests that Apollodoros and Pausanias used similar narratives of the war.

According to the various kinglists in the Apollodoran tradition, Alkamenes reigned 35, 36, 37 or 38 years, and Theopompos 47 years. Then

i. if the war begins in 739, its 5th year is 735: if this is Theopompos' last year, and Polydoros' first, then Theopompos accedes in 781 and Alkamenes in 773 at ~~latest~~ earliest. The Apollodoran tradition makes Ol.1 fall in the reigns of Theopompos and Alkamenes (allegedly in the 10th year of each), so this date for the war is too late for Apollodoros.

ii. if the war begins in 744 or 743, its 5th year is 740 or 739: assuming the same as above for the two kings, Theopompos accedes in 786 or 785: in the second case Ol.1 falls in his 10th year as in the Apollodoran tradition. Alkamenes however accedes at ~~latest~~ earliest in 778, so that Ol.1 falls in his third year. Consequently, if this dating of Theopompos and the war represent the Apollodoran dates, Eusebius is wrong is placing Ol.1 in the 10th year of Alkamenes.

If Theopompos accedes in 786 or 785, then Nikandros acceded in 824 or 823, and Charilaos in 884 or 883: these last are 108 years, or the 108th year, before Ol.1, which is the Apollodoran date for Lykourgos the regent. The 108 years complete are witnessed by all authorities except Jerome, so the Apollodoran Lykourgos should be placed in 884, and this made the year of the accession of Charilaos. Nikandros will then accede in 824, and Theopompos in 786: his 10th year is therefore 777, the year before Ol.1.1, and the identification of Ol.1.1 with his 10th year will be due to the usual confusion between a period before and a period ending in the base date. The first Messenian war will begin in 744, and the battle of the fifth year, and the death of Theopompos, will fall in 740. Alkamenes will accede in 778 at ~~latest~~ earliest, and his 2nd year is the 10th year of Theopompos in 777; he dies in 741 at latest.

5. The Apollodoran dating of the Agiads

With these considerations in mind, we may compare the various Apollodoran variants of the Agiad king list: hapax legomena are underlined:

1 Diodoros ap. Chronographia	2 Eusebius' table in Chronogr.	3 Series Regum Armenia	4 Series Regum Jerome	5 Chronographeion Syntomon	6 Durations given in the Kanones A.	J.
From the fall of Troy to Ol 1 is 308 yrs, of which the first 80 go up to the Return. Eurysthenes began to reign in the 80th year and reigned						
~~42~~ 42	42	42	42	42	42	42
Agis 1	1	1	1	1	1	1
Eche-stratos 31	37	35	35	35	35	35
Labotas 37	37	37	37	37	37	37
Doryssos 29	29	29	29	29	(29)	29
Agesi-laos 44	44	44	44	44	44	44
Arche-laos 60	60	60	60	60	60	60
Teleklas 40	40	40	40	41	(40)	40
Alka-menes 38	37	37(35)	37	36	37	37
his 10th year....776	776					
	In sum: 325 yrs	in sum: 325		in sum: 324	in sum: 350	from Troy 405

i. Variants in versions 3 to 6

(a) the last two figures in 5 are probably due to a copyist overruning Teleklos' total in his column of figures, and compensating in the years given to Alkamenes

(b) the variant in the last figure of 3 is probably a copyists' error

ii. The totals

(a) of regnal years: only one is the total of the figures given, that of SRA

I. The sum of 324 years given by version 5 is too small by one year. ~~[illegible]~~ See section 6 below.

II. The sum of 350 years given by version 6 also appears in another context in Jerome, as a part of the notice of the institution of the ephorate at 01.5.1,5.3, and 5.4 (760, 758, 757). The Armenian places the ephorate at 01.5.4 (757) without mentioning the 350 years. The 350 years of the Spartan kings are thus 1107-758; and since 1107 is Kastor's date for the Return, this period presumably comes from him. Chronographically, 350 = 39 x 9 minus 1.

III. The sum of 325 years given by version 2 is too small by two years, and belongs to version 3 to 6, from one of which it has been taken.

(b) from Troy to the first Olympiad

I. The number of 405 years given by Jerome is too small by one year for the period actually given in his Kanones, but it is accurate for the Armenian version.

II. The sum of 308 years quoted from Diodoros is universally amended. The context is a muddled and repetitious summary of Diodoros' quotation from Apollodoros, and an alternative to amending the figure is to suppose its misplacement, i.e. it has been given the wrong termini. This supposition is supported by the fact that a period of 308 years appears in the Apollodoran tradition: if we read 37 years for Echestratos, the 308th year of the dyarchy is Alkamenes 18th, of which the Armenian Kanones report that Apollodoros gave it as the year of the Lykourgan laws. This notice, naming the 18th year, is actually placed at the 20th, which is the 308th year of the dyarchy when Echestratos has 35 years as in the Armenian Kanones. Jerome's manuscripts oscillate between the two years for this notice, and also mention Apollodoros.

From this we should infer that Apollodoros reckoned the 18th year of Alkamenes as the 308th year of the dyarchy, and therefore gave Echestratos 37 years. The 35 years of Echestratos seem to be Eusebius' own invention, going with his 405 years from Troy to Ol.1, in place of the 407 years of Apollodoros.

6. The Eratosthenic and Apollodoran eras (see also Chapter VII)

The united testimony of our sources gives the following:

From Troy to the Return:	80 years
From the Return to Ionia:	60 years
From Ionia to Lykourgos:	159 years
From Lykourgos to Ol.1	108 years
From Troy to Ol.1	407 years.

Diodoros on the other hand reports that according to Apollodoros there were 80 years from Troy to the Return, and 328 years of Spartan kings to Ol.1. But 328 years is the total from the beginning of the dyarchy to the death of Alkamenes (reading 37 years for Echestratos, and 38 for Alkamenes). We should thus take the combined authority of our other sources and infer that Diodoros gave the wrong termini to the Apollodoran period of 328 years, which should run from the beginning of the dyarchy to the death of Alkamenes.

We therefore seem to have three Apollodoran periods reckoned from the beginning of the dyarchy:

i. 308 years to the legislation of Lykourgos in the 18th year of Alkamenes.

ii. 324 years as given erroneously for the regnal years in the Chronographeion Syntomon, if reckoned from the beginning of the dyarchy, is equivalent to the 34th year of Alkamenes. The only event attributable to this year is the beginning of the First Messenian War.

iii. 328 years as given erroneously by Diodoros for the period from the Return to Ol.1, if reckoned from the beginning of

the dyarchy, are equivalent to the 38th and last year of Alkamenes. Diodoros thus equated the Return with the beginning of the dyarchy, and this equation is the source of the Eusebian error in placing the 308 years. It follows that Apollodoros did not equate the two events.

7. Absolute dating of the Apollodoran reckonings.

On the preceding argument it appears that the year 741 was the 328th year of the dyarchy, so that Apollodoros dated the beginning of the dyarchy to the accession of Eurysthenes in 1068 B.C. Consequently, the Return in 1103 is 35 years earlier than the beginning of the dyarchy, and this period has been omitted by Diodoros. We may infer that Apollodoros allowed a 35-year reign to Aristodemos at Sparta. His datings may therefore be tabulated as follows:

1183: Fall of Troy
1103: Return, accession of Aristodemos (35 years)
1068: beginning of the dyarchy: Eurysthenes (42)
1043: Ionia
1026: accession of Agis (1)
1025: accession of Echestratos (37)
988: accession of Labotas (37)
951: accession of Doryssos (29) (943/2: Homer)
922: accession of Agesilaos (44): 884 regency of Lykourgos
878: accession of Archelaos (60): 824 accession of Nikandros
818: accession of Teleklos (40): 786 accession of Theopompos
778: accession of Alkamenes (38)
777: 407th year after Troy: Alkamenes 2nd = Theopompos 10th
761: Alkamenes 18th = 308th year of the dyarchy = laws of the younger Lykourgos
745: the 324th year of the dyarchy completes the period before the 1st Messenian War
744: the 325th year of the dyarchy: beginning of 1st Mess. War
740: accession of Polydoros: 5th year of the war: death of Theopompos
739: accession of Theopompos' successor
725: 20th and last year of the 1st Messenian War.

The following details may be noted:

1. the dates 1 year later than the above are due to the identification of the 407th year after Troy with 776 B.C., which is widespread in the Eusebian school, and affects Pausanias' dates for the war.

ii. on the above dates the year 776 is the 293rd year of the dyarchy, and the 10th year of Alkamenes is 769: a difference of 7 years. When 776 was identified with Alkamenes' 10th, it appears that an attempt to destroy the surplus 7 years was made by reducing even further the years of Echestratos, who then appears in version 1 with only 31 years, which dates the first Olympiad 293 years from the beginning of the dyarchy.

8. The Eurypontid kings

The Chronographia also gives a list of the Eurypontid kings, which is defective by at least one name (that of the eponym) and 39 years. There are two versions, one two years longer than the other, and so parallel to the 35 and 37 years for Echestratos the Agiad: the longer is to be taken as the Apollodoran version, the shorter as Eusebian.

	Eusebius	Apollodoros	Dates
Prokles	49	51	1068-
(Eurypon)		(39)	(1017-)
Prytanis	49	49	978-
Eunomos	45	45	929-
Charilaos	60	60	884-
Nikandros	38	38	824-
Theopompos	47	47	786-740

B. The interval of peace and the Second Messenian War

The second Messenian War is as variously dated as the first, but we have no dated list of kings for this period, so the checks of our sources on one another are much less stringent. Pausanias gives generations and year-dates as follows:

i. Rhianos of Bene made Aristomenes the hero of the second war (unlike Myron of Priene, who made him kill Theopompos in the first war, a view which Pausanias condemns by his reading of Tyrtaios), and named the Spartan king of this war as Leotychides. Pausanias, followed by Clinton and others, is very indignant about

this king, presumably forgetting the Herodotean pedigree, which makes Leotychides I the great-great-grandfather of the Leotychides II who was deposed in 469 B.C. Pausanias notes that Tyrtaios did not name the kings of the second war, but only mentioned the fact that the grandfathers of the Spartans fought the first war; whence Pausanias names Anaxandros (grandson of Polydoros) and Anaxidamos (great-grandson of Theopompos, because one generation did not reign) as his own generation dates. But in his narrative, where he claims to follow Rhianos, Pausanias names Anaxandros as the Spartan commander at the Battle of the Boar's Grave; and so it would seem he found Anaxandros in Rhianos also. Anaxandros is the great-great-grandfather of Kleomenes I, the contemporary of Leotychides I, so that Anaxandros and Leotychides I belong to the same generation.

ii. In archontic years and according to the narrative Pausanias dates the second war 681-668; in Olympic years 685-668 B.C.

iii. According to these dates either of archontic or Olympic years, there are 39 years of peace, but in his narrative Pausanias dates the revolt in the 38th year, i.e. the revolt went unchecked in its first year, and the Spartan campaigns began in the 39th year. This odd year seems to have disturbed Pausanias' calculations: the 39 clear years represent the generation of the fathers between the two warrior generations of the grandfathers and grandsons.

iv. Jerome dates the beginning of the Messenian Revolt to Ol. 35.2, 35.3, 35.4, and 36.1, while the Armenian places it at Ol. 36.3: these years are 639, 638, 637, 636, and 634: Jerome thus has 86 to 89 years between the wars, and the Armenian reckoning implies 90 clear years. Justin gives an interval of 80 years.

v. Plutarch gives the period of Messenian subjection at 230 years, i.e. 599-369 B.C., which implies an end of the second war in 600 B.C.

vi. Pausanias further records that Aristomenes predeceased Ardys of Lydia, and married his youngest daughter to Demagetos of Rhodes, great-grandfather of Diagoras, Olympic victor in 464 B.C. Anaxandros, Leotychides I and Aristomenes are thus all great-great-grandfathers of men active from about 514 to 464 B.C.

On these various dates, we may note

(a) in Pausanias' narrative, Anaxandros was disastrously defeated at the Battle of the Boar's Grave, in the second campaign of the war. This might be interpreted therefore as belonging to the last year of Anaxandros. Reckoning in 39-year generations back from the "accession" of Kleomenes in 519, Anaxandros' son accedes in 636, so Anaxandros' "last" year is 637, giving the first year of the war in 638, and the revolt in 639, which are Jerome's dates. If Jerome's dates come from Apollodoros therefore, they imply that the Apollodoran kinglist continued:

Polydoros	740-	104 = 39 x 2 2/3
Eurykrates		
Anaxandros	-637	
Eurykratides	636-	117 = 39 x 3
Leon		
Anaxandrides		
Kleomenes	519-	

(b) Pausanias' dates on the other hand assume that the generation of Polydoros coincided with the first war, the generation of Eurykrates with the peace of 39 years, and the generation of Anaxandros with the second war: that is, that Anaxandros acceded about 685-680, Eurykrates about 724-19, leaving Polydoros a reign of less than 20 years. Thus he both allows less than

than 104 years for the three reigns and pulls back the second war fully into the generation of Anaxandros.

C. The non-Apollodoran tradition

The Excerpta Barbari gives a list of Agiad kings which differs from all our other sources by introducing two names more before Polydoros. Criticism and attribution of this list are very difficult, for these two kings are not mentioned elsewhere, even in narrative or anecdote: yet the anchisteia analysis strongly suggests that this is an older and better list than that of Herodotus and Apollodoros. The Barbarus states that the Spartans reigned for 325 years and ended in the first Olympiad when Ahaz was king of Judah; that they began in the 20th year of Saul and ended in the first year of Ahaz of Judah, when the first Olympiad was celebrated; that the Spartans reigned altogether 350 years. He then gives a list, of which the unstated total is 370 years, as follows:

Eurysthenes	42
Agis	2
Echestratos	34
Labotas	37
Doryssos	29
Agesilaos	30
and Menelaos	44
Archelaos	60
Teleklos	40
Alkamenes	27
Automedes	25

The reigns of 2 plus 34 years for Agis and Echestratos are equivalent to the 1 plus 35 years given by Eusebius, which is 2 years less than the Apollodoran figures. Alkamenes has 27 years in place of the Apollodoran 38, which is a reduction of 11 years. Against this is the addition of two names and 30 plus

25 years, making a net addition of 42 years. The purpose of such an addition, it may be inferred, was to replace the years given by Apollodorow to Aristodemos by years attributable to the dyarchy, and therefore to identify the beginning of the dyarchy with the Return.

The rubric draws on the Eusebian tradition of 325 years and also on the tradition represented by the period of 350 years, which on evidence from the Kanones we have attributed to Kastor. Unless therefore the list derives from yet a third source, it represents Kastor's tradition, and the ephorate in the 350th year of the dyarchy belongs to the 6th year of Automedes.

The only other information we possess about Kastor's Spartan dates comes from the Attic list in the Chronographia, which names the elder Lykourgos as a contemporary of Diognetos (899-871) and the younger as conetmporary with Thespieus (832-805). Jerome dates Lykourgos to Diognetos 6th, 10th, or 11th: on Kastor's Athenian dates the years of Diognetos = 894, 890, 889. The next notice of Lykourgos in Jerome occurs at Thespieus 6th or 7th, i.e. on Kastor's Athenian dates in 827 or 826. The two dates for Lykourgos known from other sources which belong to these periods are those of Apollodoros for the elder Lykourgos in 884, and of Kallimachos for the Olympic truce in 828: it seems probable that Kastor adopted these two dates.

If the upper date of this list is 1107 B.C., Automedes' last year was 738; and it is fair to assume that Automedes' successor was Polydoros, who would thus begin to reign in 737. This suggests that the later date of the first Messenian war

(beginning is 739) belongs to this tradition. We may set forth this list and events:

Eurysthenes	42	1107 -	
Agis	2	1065 -	
Echestratos	34	1063 -	
Labotas	37	1029 -	
Doryssos	29	992 -	
Agesilaos	30	963 -	
Menelaos	44	933 -	
Archelaos	60	889 -	884: regency of Lykourgos
Teleklos	40	829 -	828: laws of Lykourgos
Alkamenes	27	789 -	
Automedes	25	762 - 738:	757 the ephors
			739-20 Messenian War

The variations away from Apollodoros shown by Eusebius seem to be mainly due to this tradition, which may even have influecned the original error in Diodoros, where the beginning of the dyarchy is equated with the Return. Apollodoros gave his second and third kings 1 plus 37 years: Kastor gives 2 plus 34 and Eusebius 1 plus 35. Apollodoros gave Alkamenes 38 years, Kastor 27, and Eusebius 37. By these means Eusebius is able neatly to end his Spartan kings at Ol.1, thus at a stroke replacing the laborious periods of Apollodoros and Kastor by a simple historiographic concept of monarchic and "authentic" historical epochs. The Barbarus may reproduce something of Eusebius' argument, and the list which he rejected.

The Barbarus does not give a list of the Eurypontidai, but a non-Apollodoran list was in existence, and is given by Pausanias, without dates. Its chronography may be that of the Eurypontid list known to Cicero, but there is no positive evidence that this Ciceronian list was Kastor's.

APPENDIX II

Dorian Argos

No list of the Dorian kings of Argos survives, and the only chronographic treatment appears in the problem of Pheidon. One or two other kings are mentioned and given generation dates by Pausanias; for Pheidon we have three dates, some lists of ancestors, and discussions of his Macedonian collaterals.

1. Pheidon and the Macedonians.

The association of Pheidon with Macedon appears first in Theopompos; Herodotus mentions Pheidon, and gives the short Macedonian genealogy, but does not associate the two. Theopompos makes Karanos of Macedon the son of Pheidon (unless the text of Synkellos is at fault); Synkellos reports the tradition that Karanos was the brother of Pheidon, and Satyrus has a genealogy to the same effect. An anonymous source reported by Synkellos also has a Temenid genealogy of the Macedonians which has nothing to do with the Argive Temenids. These variants are as follows:

Anonymus	Theopompos	Satyrus
Temenos	Temenos	Temenos
Lachares	Keisos	Keisos
Deballos		Maron
Eurybiades	Thestios	Thestios
Kleodaios	Merops	Akoos
Kroisos	Aristodamidas	Aristodamidas
Poias	Pheidon (7th)	Karanos
Karanos	Karanos	

The only value in these archaizing productions lies in the fact that Theopompos gives Argaios, the eponym of the Macedonian kings, four ancestors back to Karanos, the founder of the dynasty. This suggests that in the fourth century it was believed that the Argives and Macedonians used the four-

generation anchisteia.

The gap of one generation in the list of Theopompos, and the appearance of the name Merops, suggests that the Maron of Satyrus has been misplaced, and Akoos omitted. Both Maron and Merops may represent the Medon of Pausanias.

2. Chronographic Dates for Pheidon

A. The earliest of the three dates for Pheidon in our sources is that shared by Theopompos and the Marmor Parium, both of which make Pheidon the 11th descendant of Herakles, and so 7th from Temenos; while the Marmor adds the year date equivalent to 895 B.C.

The name of Herakles appears on the Marmor at 1295 B.C. Thus Pheidon is 400 = 39 x 10 plus 10 years later, which accords with the generation-date. Moreover, on the short Agiad list there are 21 names from Herakles to Kleomenes inclusive, so that the total span of years should be 39 x 21 = 819 from 1299 to 480. The appearance of Herakles at 1295 suggests that the Parian was using this reckoning.

As the 11th Herakleid, Pheidon should begin 39 x 10 years later than Herakles, and 1299 minus 390 is 909: this makes 895 the 15th model year of Pheidon.

The Parian also states that Archias of Syracuse was the tenth descendant of Temenos, that is, three generations junior to Pheidon. His generation should therefore be dated 792-54 B.C., and this corresponds to the usual dating of Aischylos of Athens, named as his contemporary by the Marmor. (See further, p.270f)

B. The next date for Pheidon is that of Ephoros and Pausanias: Pheidon is the tenth from Temenos, and at Olympia in 748 B.C. The

tenth 36-year generation after Temenos in 1089 (Ephoros' date for the Return) begins in 765 B.C., so that 748 is Pheidon's 18th model year. It is also 514 plus 39 x 6, which suggests that Ephoros was basing himself on Athenian chronography.

At this date Pheidon is contemporary with Archias, and in Plutarch and elsewhere both are concerned in the story of the boy Aktaion.

C. Herodotus names Pheidon as the father of Leokedes, who was one of the wooers of Agariste of Sikyon. Agariste's son Kleisthenes was probably archon in 525 B.C., so that the Herodotean Pheidon cannot be earlier than the last quarter of the seventh century B.C.

These various years and generation dates for Pheidon may be compared with the Spartan generations thus:

I.	1. Aristodemos, brother of Temenos		
	2. Eurysthenes		
	3. Agis		
	4. Echestratos		
II.	1. Labotas		
	2. Doryssos		
	3. Agesilaos: Pheidon 7th Temenid (895)		
III.	1. Archelaos		
	2. Teleklos		
	3. Alkamenes: Pheidon 10th Temenid (748): Archias		
IV.	1. Polydoros		
	2. Eurykrates		
	3. Anaxandros		
	4. Eurykratides :	Pheidon (Hdt)	
V.	1. Leon	Leokedes, who	
	2. Anaxandrides	Meltas	wooed Agariste
	3. Kleomenes		Kleisthenes

That is, Pheidon appears to be contemporary with the last generation of the second, third, and fourth royal anchisteiai at Sparta.

3. The Argive king list

The remainder of our information about the Argive kings comes

from various notices in Pausanias. He names the first three as Temenos, Keisos, and Medon; Eratos is contemporary with Nikandros of Sparta, and Damokratidas with the second Messenian war. The ninth descendant of Medon was Meltas son of Lakedas, and he was deposed. His father bears the same name as Leokedes son of Pheidon in Herodotus.

According to the Spartan lists used by Pausanias, the Eurypontid Nikandros is contemporary with the Agiad Teleklos, who is the 8th descendant of Aristodemos. Eratos is then the 9th Temenid and 7th descendant of Medon. Damokratidas, 4 generations later, is the 13th Temenid and 11th descendant of Medon. But the 9th Medontid place is already occupied by Meltas son of Lakedas: Pausanias' list then probably made Damokratidas the successor of the deposed Meltas. His list would then read:

1.	Aristodemos	Temenos
2.	Eurysthenes	Keisos
3.	Agis	1. Medon
4.	Echestratos	2.
5.	Labotas	3.
6.	Doryssos	4.
7.	Agesilaos	5. (Theopompos' Pheidon)
8.	Archelaos	6.
9.	Teleklos	7. Eratos
10.	Alkamenes	8. Pheidon (748)
11.	Polydoros	9. Lakedas
12.	Eurykrates	10. Meltas (9th Medontid by exclusive count)
13.	Anaxandros	11. Damokratidas

On this dating, the Argive army which Alkamenes encountered at Helos on the coast would be serving under Pheidon, but Pausanias does not associate the two.

If we wish to use the statements of Pausanias, and at the same time maintain the Herodotean dating of Pheidon, we may argue as follows. (The argument is given here for what it is

worth: if we had more knowledge of the Argive kinglist, it might well prove to be improper.)

The construct by Theopompos of 4 generations before Argaios of Macedon suggests that be believed the Argive anchisteia comprised four generations. Consequently the number of generations in Dorian Argos should be the same as in the long Agiad list in Sparta. If we place Pheidon in the last generation of the 4th anchisteia, and take Meltas as his grandson, Meltas' 9th ancestor Medon will belong to the generation of Archelaos at Sparta - the first generation of the third anchisteia. Medon has two acestors only, Temenos in the generation of the Return, and Keisos. It may be therefore that Temenos and Keisos each represent an anchisteia. These suggestions may be shown:

	SPARTA	ARGOS	
I.	1. Aristodemos	Temenos	
	2. Eurysthenes		
	3. Agis		
	4. Echestratos		
II.	1. Labotas	Keisos	
	2. Doryssos		
	3. Agesilaos		
	4. Menelaos		
III.	1. Archelaos	Medon	(Althaimenes "grandson" of Temenos
	2. Teleklos	Eratos	goes to Rhodes: this is the
	3. Alkamenes		generation after the port of
	4. Automedes		Mothone and the Rhodian
IV.	1. Polydoros	.....	"thalassocracy")
	2. Eurykrates	.....(Perdikkas in Macedon)	
	3. Anaxandros	Damokratidas	
	4. Eurykratides	Pheidon	
V.	1. Leon	Leokedes	
	2. Anaxandrides II	Meltas: his deposition may be associated	
	3. Kleomenes	with the loss of Thyrea in 546	

On a 25-year reckoning, generation IV.1 is contemporary with king Aigisthos of Salamis and king Keisos of Idalion in Cyprus, who were ruling in 673: the first name may be epic, but Keisos suggests direct Argive influence.

APPENDIX III

The Athenian Lists

A. Kastor's list as represented by Eusebius appears in:

Chronographia		Exc.Eus.	Ser.Reg. (Arm.)	Ser.Reg. (Jer.)	Kan. (Arm.)	Kan. (Jer.)	Synkellos
Kekrops	5	50	50	50	50	50	50
Kranaos	9	9	9	9	9	9	9
Amphiktion	9	10	10	10	10	10	10
Erichthonios	50	50	50	50	50	50	50
Pandion	40	40	40	40	40	40	40
Erechtheus	50	50	50	50	50	50	50
Kekrops II	40	40	40	40	40	40	40
Pandion II	25	25	25	25	25	25	25
Aigeus	48	48	48	48	48	48	48
Theseus	30	30	30	30	30	30	31
Menestheus	23	23	23	23	23	23	33
					376	375	
Demophon	33	33	33	33	33	33	23
Oxyntes	12	12	12	12	12	12	10
Apheidas	1	1	1	1	1	1	1
Thymoites	8	8	8	8	8	8	9
Melanthos	37	37	37	37	37	37	37
Kodros	21	21	21	21	21	21	21
Medon	20	8	20	20	20	20	20
Akastos	36	36	326	36	36	36	35
Archippos	19	19	19	19	19	19	19
Thersippos	41	41	41	41	41	41	40
Phorbas	30		31	31		31	30
Megakles	30		30	30	30	30	28
Diognetos	28		28	28	28	28	28
Pherekles	19	19	19	19	19	19	19
Ariphron	20	20	20	20		20	20 or 31
Thespieus	7	27	27	27		27	27 or 40
Agamestor	17	17	20	20	20	20	17 or 27
Aischylos	23	23	23	23	23	23	14
12th=776		12th=776			2nd=776	3rd=776	
Alkmeon	2	12	2	2	2	2	2
decennials	70	70	70	70	70	70	70
From Kekrops to Ol.1	780	780					

Of these sources, the Series Regum copy from the Kanones, and all four of these give Kastor's list in its Eusebian form. Synkellos quotes Eusebius, Africanus, and "others". The Chronographia and the Greek Excerpta of Eusebius are thus the only authorities for Kastor's original list, and these vary at the termini.

According to the Chronographia, Kastor placed the Ionian Migration in 1043 B.C., and in KA this is placed at Akastos 13th, and by Jerome at Akastos 11th. Consequently it is probable that the lower terminal figures of Kastor should so read that the year 1043 falls in the time of Akastos. Moreover, the first Olympiad must fall in the time of Aischylos.

The variants of 1 year in the equations between the 2nd or 3rd years of Aischylos and the first Olympiad may be explained by a typical confusion between 780 years before 776 and 780 years ending in 776. The counting of 776 as Aischylos' 2nd year places the decennial archons in 752-683, which is already found in Dionysius' archon-date for the foundation of Rome. It is probable that this dating was not intended by any chronographer for two reasons: first that 683 is 514 plus 39 x 4⅓, and if the annual archons begin in 683, the decennials begin in 753, so that Aischylos 2nd (or 12th) is 777 B.C.; second that in chronographic monadic years "780 years before Ol.1" means before, and not ending in. It therefore appears that Jerome is the better source as between these two years.

With the decennials beginning in 753, Alkmeon begins in 755 or 765, and it is a question which was Kastor's date. Eusebius says that Kastor reckoned 244 years for the kings of Rome, and 460 years of consuls ending in 61 B.C., i.e. the consuls begin in 520, and the kings in 764. But the usual year for the end of Tarquin was 510 B.C., not 520, so that when the upper terminus for Romulus is brought down by a similar 10 years, it is placed at 754 B.C., the year that Alkmeon begins when he has

a 2-year reign and Aischylos 2nd is equated with Ol.1. It would appear therefore that Eusebius or his source assumed that Kastor also used the equation Alkmeon = Romulus, and finding that Kastor's Alkmeon began 10 years earlier, put Romulus there also.

Kastor's years for Aischylos, Alkmeon and the decennials should therefore be read:

Aischylos first	12:	788-777	(Chronographia, Excerpta Euseb.)
last	11:	776-766	
Alkmeon	12:	765-754	(Exc. Eus.)
decennials	70:	753-684	

With Aischylos beginning in 788, and the year 1043 being about the time of Akastos 11th or 13th, we must read Thespieus 27 as in the Exc. Eus. as against the 7 years of the Chronographia. Akastos then accedes in 1055 B.C., and 1043 is his 13th year.

The note of 780 years of kings before Ol.1 refers to a chronographic period (39 x 20) and this guarantees the figure. The first year of Kekrops is then 1556 B.C.

In his introduction to the list, Eusebius reports Kastor for the following periods:

the Erechtheidai (Kekrops to Thymoites)	450 years
Melanthos and Kodros	52 years
Kodros to Alkmeon	209 years
the decennials	70 years

The figure for 209 up to the end of Alkmeon gives 962-754 B.C., which bears no relation to the figures of the list. But in a preceding paragraph about Ogyges, the Armenian confuses the figures 190 and 109: if in this present place we read 290 years, we have the period, reckoned from the beginning of Alkmeon's reign, of 1055-766 B.C., and 1055 is the date for

the accession of Akastos. Eusebius or the Armenian has therefore muddled the termini of this period.

Another 52 years before 1055 takes us back to 1107 B.C., which on the figures of this list is Melanthos 27th. This is the year given in the Kanones for the Return of the Herakleidai, which is probably the terminus intended here.

The year 1107 is the 450th year of the monarchy beginning in 1556 B.C. The periods of the rubric thus appear to have been collected from different computations in Kastor and put together in a list with muddled termini; they should read:

Kekrops to the Return:	450	years (ending in the year 1107)
Return to Medon's last year	52	
Akastos 1st to Aischylos' last	290	
Alkmaeon	12	
decennial archons	70	

With the upper terminus fixed at 1556, and the accession of Melanthos in 1133, the Erechtheid period is 423 years. There are doubts of two details only in this period: the Chronographia reads 5 for Kekrops, where the Exc. Eus. reads 50, and 9 for Amphiktion as against 10. The remaining figures total 369 years, so that between them Kekrops and Amphiktion need 54. Keeping as closely as possible to the figures in the text of the Chronographia, we should read <4>5 and 9.

Chronography of Kastor's list

So far as our evidence goes, therefore, Kastor's list read as in the table below, where the chronographic analysis is also given. This analysis divides the whole list into 7 groups of names (excluding the decennial archons), in which textual evidence for the figures varies in two only, the first and last. The

Kekrops	(4)5	
Kranaos	9	63 = 27 x 2⅓
Amphiktion	9	
Erichthonios	50	
Pandion	40	180 = 27 x 6⅔
Erechtheus	50	
Kekrops	40	
Pandion	25	
Aigeus	48	126 = 27 x 4⅔
Theseus	30	
Menestheus	23	
Demophon	33	
Oxyntes	12	
Apheidas	1	112 = 27 x 4 + 4
Thymoites	8	
Melanthos	37	
Kodros	21	
Basilic total:		27 x 17
Medon	20	
Akastos	36	116 = 27 x 4⅓ − 1
Archippos	19	
Thersippos	41	
Phorbas	30	
Megakles	30	107 = 27 x 4 − 1
Diognetos	28	
Pherekles	19	
Ariphron	20	
Thespieus	27	
Agamestor	17	99 = 27 x 3⅔
Aischylos	23	
Alkmeon	12	
decennials	70	= 27 x 2⅓ + 7
Archontic total:		27 x 14⅓ + 5
Grand total: 873 years: 27x 32⅓		

amenability of the remaining five groups to chronographic analysis (that is, where there is no textual dubiety) strongly supports the version of the figures of the first and last groups determined on textual grounds. The figure of 780 mentioned by the Chronographia at the 12th year of Aischylos shows that Kastor also reckoned his Athenians according to a 39-year generation. The archontic total without the decennials is (in generations only) 27 x 12, which is the figure required by the Corintho-Attic construct, not by the Chronographic Model. If Troy fell in the lastyear of Menesthes, then it is dated to 1188 B.C.

B. The Attic list of the Chronographeion Syntomon

The Chronographeion Syntomon gives an Attic list which is badly damaged about the centre portion, omitting the names of Apheidas and Medon. Elsewhere, the list confuses names. The total given for the Attic regnal years is 849, while the details add up to 852; the list ends with Alkmeon, but the Athenian arche is said to end in Manasseh 32nd, which means that the year of the decennials have been forgotten in the list. The list reads:

Kekrops	30	
Karanaos	9	
Amphiktyon	10	
Erichthonios	53	
Kekrops	40	(i.e. Pandion)
Erechtheus	3	
Kekrops	43	
Pandion	29	
Aigeus	48	
Theseus	34	
Menystheus	29	
Demophon	33	
Oxyntes	31	
(Apheidas omitted)		
Thymoites	10	
Messanthos	37	
Korax	20	(i.e. Kodros, with Medon's number)
Tharsippos	38	(i.e. Akastos)
Archippos	17	116 = 27 x 4 1/3 - 1
Thersippos	41	
Phorbas	33	
Mesaklos	30	108 = 27 x 4
Theognitos	26	
Phereklos	19	
Ariphron	33	
Thespieus	40	119 = 27 x 4 1/3 + 2
Agamistor	21	
Aischylos	23	
Agmaion	2	
(decennials	70)	= 27 x 2 1/3 + 7

The chronography suggests that from "Korax" downwards the numbers are sound. They make an archontic total of 27 x 12 2/3 + 1, which is much nearer to the requirements of the Chronographic Model (27 x 13) than is Kastor's. We may conclude that the list was not, in origin,

closely associated with Kastor's.

The badly damaged portion of the list is that from Oxyntes to the name of Korax. All our other sources give Kodros 21 years, just as all (including this) give Melanthos 37 years: we may perhaps assume that Melanthos, 37, Kodros 21, Medon 20 was a convention common to allthe chronographers, and insert Kodros (21, Medon) 20 here. The 10 years of Thymoites may represent Apheidas + 1 plus Thymoites 9, as in the list of the Excerpta Barbari (see below); Oxyntes 31 probably stands for 14 (ΛΑ for ΙΔ): 14 is the number here in the list of the EB, and that list also suffers from an ancient corruption of ΙΔ to ΛΑ at the name of Amphiktion. With these alterations, Dempphon to Kodros in this list occupy 115 = $27 \times 4\frac{1}{3} - 2$.

The total of 849 years given to this list was added up after these corruptions occured, but before another 3 years were added somewhere in the list. The chronography suggests that these surplus years do not occur in the archontic portion of the list. The obvious possibility in the upper portion is that Erichthonios Eratosthenes 53 has been created by a copyist who noted with astonishment that the figure for Erechtheus was 3. There is no need to alter any of the other figures for the basilic section, of which the chronography is:

Kekrops	30	$99 = 27 \times 3\frac{2}{3}$	Aigeus	48	$144 = 27 \times 5\frac{1}{3}$
Kranaos	9		Theseus	34	
Amphiktion	10		Menestheus	29	
Erichthonios	5(0)		Demophon	33	
Pandion	40	$115 = 27 \times 4\frac{1}{3} - 2$	Oxyntes	(14)	$82 = 27 \times 3 + 1$
Erechtheus	3		(Apheidas	1)	
Kekrops	43		Thymoites	(9)	
Pandion	29		Melanthos	37	
			Kodros	(21)	

Nevertheless, it may be thought more probable on chronographic grounds only, that the figure for Kekrops I should be 50. This would be textually possible (N for Λ), and would turn the list into a very neat chronographic construct, which could be shown in full as follows:

Possible Chronographic Original of the Attic list in the Chronographeion Syntomon

Kekrops I	<50>	119 = 27 x 4⅓ + 2
Kranaos	9	
Amphiktion	10	
Erichthonios	<50>	
Pandion	40	115 = 27 x 4⅓ - 2
Erechtheus	3	
Kekrops	43	
Pandion	29	
Aigeus	48	111 = 27 x 4 + 3
Theseus	34	
Menestheus	29	
Demophon	33	115 = 27 x 4⅓ - 2
Oxyntes	<14>	
Apheidas	<1>	
Thymoites	<9>	
Melanthos	37	
Kodros	<21>	

Basilic total: 27 x 17 + 1

Medon	20	116 = 27 x 4⅓ - 1
Akastos	38	
Archippos	17	
Thersippos	41	
Phorbas	33	108 = 27 x 4
Megakles	30	
Diognetos	26	
Pherekles	19	
Ariphron	33	119 = 27 x 4⅓ + 2
Thespieus	40	
Agamestor	21	
Aischylos	23	
Alkmeon	2	
decennials	70	70 = 27 x 2⅔ + 7

Archontic total: 27 x 15 + 8

Grand total: 873 years: 27x32⅓

as corrected from absolute dates (see App. X): 27 x 32.

This chronographic construct possesses the same overall period as Kastor's, but divides the years differently between the

basilic and archontic sections of the list. Its grouping of years is also more formal than Kastor's, comprising the following series of generations: 4⅓, 4⅓, 4, 4⅓, 4⅓, 4, 4⅓ to the beginning of the decennials. Kastor's series is 2⅓, 6⅔, 4⅔, 4, 4⅓, 4, 3⅔.

On the assumption that the fall of Troy was equated with the last year of Menestheus, the date given by this construct is 1212 B.C., three years earlier than that of the Marmor Parium, which also used the Chronographic Model. The date given by the corrupt list is 1208. The extended Hebrew chronography used by the Kanones from which this list was taken may have stimulated the canonographer to find a list with a longer archontic period than Kastor's. The chronographer responsible for the list is unknown. See further for evidence from absolute dating, Appendix X below.

C. The Attic list of the Excerpta Barbari

The Barbarus dates the upper terminus of his Sikyonian, Argeio-Mycenaean and Attic lists in terms of the exodus of Africanus, 1796 B.C. His first year of Kekrops is the 208th year of the exodus. His list in its present form reads:as in the table below.

The basilic total of 492 years is 9 years less than the total of details, which suggests that the addition was made at the time when Amphiktion's figure was 31, insted of the present 40 (ΛΑ for ΛΜ). But this figure itself was probably a corruption, since Kranaos is omitted.

I.	Cecrops	50
II.	Amphictryus	40
III.	Ericthonius	10
IV.	Pandius	50
V.	Erectheus	40
VI.	Cecrops	53
VII.	Pandius	43
VIII	In the time of Pandius son of Cecrops Cadmus son of Aginor first brought .....letters to Greece	
IX.	Egeus	48
X.	Thiseus	31
XI.	Menestheus	19
XII.	Dimofus	35
XIII	Oxyntus	14
XIV.	Afydus	1
XV.	Thymytus	9
XVI.	Melanthus	37
XVII	Codrus	21
	From Cecrops to Codrus 492 years	
I.	Medrus	20
II.	Acastus	39
III.	Archippus	40
IV.	Phorbus	33
V.	Megaclus	28
VI.	Diognitus	28
VII.	Fereclus	15
VIII	Arifrus	30
IX.	Thispeus	40
X.	Agamistor	26
XI.	Thersippus	23
XII.	Eschylus In the second year of Eschylus the first Olympiad was celebrated. From the beginning of Cecrops to Ol.1 is 814 years. But after Eschylus these XIII	
XIII	Almeus (and the remaining 9 decennials)	10
	Altogether 907 years.	

The archontic portion of the list is disturbed by the misplacing of Thersippos, who is put opposite Aischylos' figure of 23, while his own figure of 40 has been given to Archippos. In the list therefore Aischylos is without a number, but the figure actually missing is that of Archippos. The original of this archontic list was therefore:

Medon	20	x plus 99, which = 39 x 2⅔ +8
Akastos	39	
Archippos		
Thersippos	40	
Phorbas	33	104 = 39 x 2⅔
Megakles	28	
Diognetos	28	
Pherekles	15	
Ariphron	30	119 = 39 x 3+2
Thespieus	40	
Agamestor	26	
Aischylos	23	
Alkmeon	10	10 = 39 x

Thus the list is constructed on the basis of the Chronographic Model, and, for this portion, in 39-year generations. With so close an approximation to the Model, the total for the archontic period should be in the neighbourhood of 39 x 9, and Kastor's figure 19 for Archippos supplies this exactly. The first group then = 118 years = 39 x 3+1.

The figures from Demophon to Kodros are 117 years = 27 x 4⅓; Aigeus to Menestheus = 98 = 27 x 3⅔-1; Erechtheus to Pandion = 136 = 27 x 5 +1. From the total of 907 years we then have 25 years to be divided between Kranaos and Amphiktion, and the simplest supplement is Kranaos 11 (IA), and Amphiktion 14 (IΔ). The probable chronographic original of this list was then as in the table below.

This fulfils the requirement of the given total of 907 years before 683 B.C., as well as meeting all chronographic needs. The Barbarus list further states that Aischylos 2nd = Ol.1, and that from Kekrops to Ol.1 is 814 years. Since 683 plus 907 is 1590, and 1590 minus 814 is 776, his 814 years end in 777. But Aischylos' last year in 764 places his first year in 786, and Ol.1 in his 11th year: the reduction to the 2nd

Possible Chronographic Original of the Attic list in the Excerpta Barbari.

Kekrops	50	
<Kranaos	11>	
Amphiktion	<14>	135 = 27 x 5
Erichthonios	10	
Pandion	50	
Erechtheus	40	
Kekrops II	53	136 = 27 x 5 +1
Pandion II	43	
Aigeus	48	
Theseus	31	98 = 27 x 3⅔ -1
Menestheus	19	
Demophon	35	
Oxyntes	14	
Apheidas	1	
Thymoites	9	117 = 27 x 4⅓
Melanthos	37	
Kodros	21	
Basilic total:		27 x 18
Medon	20	
Akastos	39	
Archippos	<19>	118 = 39 x 3 +1
Thersippos	40	
Phorbas	33	
Megakles	28	104 = 39 x 2⅔
Diognetos	28	
Pherekles	15	
Ariphron	30	
Thespieus	40	119 = 39 x 3 +2
Agamestor	26	
Aischylos	23	
Alkmeon	10	10 = 39 x ⅓ - 3
Archontic total:		27 x 13
Grand total:		27 x 31

year is probably due to the addition of 9 years in the basilic total when Amphiktion's 31 became 40: the date was justified by the Eusebian tradition, in which the equation Aischylos 2nd = 777 was misinterpreted.

The use of the exodus of Africanus as the era of dating by the Barbarus suggests that he copied his lists from a work which used a long Herbrew chronography. It seems that here, as in the case of the Chronographeion Syntomon, the use of such

a chronography has led the compiler to search for a long Attic list from outside the Apollodoran and Kastorian tradition. If the chronographic source identified the era of Troy with the last year of Menestheus, his date for Troy was 1222 B.C., in the 80th year before the Return of the Model, in 1143. That is, the list is of the kind required by such notices as those in Thucydides: we may also note that the accession of Melanthos, and therefore his duel with Xanthos and the Boiotian Return, is placed in the 60th year after Troy, a date which appears in neither of the other lists. The extreme simplicity and amplitude of this chronographic construct suggests that it comes from an early source, but it cannot be earlier than the late fifth century, because of its use of thirds of generations.

D. The Attic list of the Marmor Parium

The inferred original of the Barbarus agrees with the source of the Marmor Parium in not including the 70 years of the decennial archons in its construction. The MP's list begins in 1581 (27 x 1/3 years later than the original of the EB), so that it has 27 x 30 2/3 years before 753. The evidence of the MP may be summarised as below. Such construction as can be made out for this list may be compared with Kastor's:

Marmor			Kastor		
Kekrops to Troy:	372 years:	27 x 13 2/3+3	Kekrops to Troy:	368:	27 x 13 2/3 -1
Troy to Ionia:	132	27 x 5 -3	Troy to Ionia:	145:	27 x 5 1/3 +1
Ionia to 753:	324	27 x 12	Ionia to 753:	290:	27 x 10 2/3 +2

This comparison, as well as the details for the earliest kings, suggests that the chronographer of the MP is a direct ancestor of Kastor.

Evidence for the Attic list of the Marmor Parium

Kekrops I	mentioned by MP in	1581, 1573: inferred reign of	50 years
Kranaos		1531, 1528	9
Amphiktion		1521, 1520, 1518, 1515	9
Erichthonios		1510, 1505	50
Pandion I		?	40
Erechtheus		1409, 1408, 1398, 1397	50
Kekrops II			40
Pandion II		1325, ?	25
Aigeus		?, 1294	48
Theseus		1259, 1256, 1251	30
Menestheus		1218, 1209 = 22nd year	23
Demophon		1207, (?) 1202	
Oxyntes			
Apheidas		Troy	
Thymoites		to	132 years?
Melanthos		Ionia	
Kodros			
Medon	.....	1077?	
Akastos			
Archippos			
Thersippos			
Phorbas			Ionia
Megakles			to
Diognetos	.....	907	753 =
Pherekles	.....	895	
Ariphron			324 years =
Thespieus			
Agamestor			27 x 12
Aischylos	.....	768?	
Alkmeon		(see p. 270)	

E. Syncellos quotes two eccentric dates for the beginning of the annual archons-list at Athens, Ol 19 (702/1) and Ol 25 (680/77). These may be explained by various combinations of regnal years as follows:

702 Kreon	680 Kreon
772-03 70 years of decennial archons	750-681 70 years of decennial archons
774-73 2 years of Alkmeon	752-1 Alkmeon's last 2 years
776-5 Aischylos' last 2 years	762-53 " first 10 years
788-77 " first 12 years	776-63 Aischylos' last 14 years
i.e. Aischylos has Kasyo's accession date & Syncellos' 14-year duration	785-77 " first 9 years
	i.e. Alkmeon has Kasyo's duration, Aischylos has the accession date of the EB. (see Apb x)

APPENDIX IV

The Corinthian Lists

	i Chronographia Text		ii Chronographeion Syntomon		iii Chronographia Table		iv Excerpta Barbari	
Aletes	38		35		35		35	
Ixion	38	36 x 4	36	36 x 4	37	36	37	36 x 4
Agelas	37	+4	37	+1	37	x 4	33	-4
Prymnis	35		37		35		35	
Bacchis	35		35		35		35	
Agelas	30	36 x 2½	30	36 x 2½	30	36 x	34	36 x 2½
Eudemos	25		25		25	2½	25	+4
Aristomedes	35		35		35		35	
Agemon	16	36 x 2	15	36 x 2	16	36 x	16	36 x 2
Alexandros	25	+4	29	+7	25	2 +4	25	+4
Telestes	12		12		12		9	
Automenes	1	36 x ½-5	1	36 x ½-5	1	36 x ½ -5	4	36 x ½ -5
Totals:	36 x 9+3		36 x 9+3		36 x 9-1		36 x 9-1	

There are two pairs of variants as shown by the totals. The shorter list may be Kastor's, for his Athenian perpetual archons total 27 x 12 -2, i.e. one year less than 36 x 9 -1, so that Aletes is made to accede the year that Kodros died. His absolute dates will then be 1076-754, and Aletes accedes 31 years after the Return. It may be therefore that the Excerpta Barbari carries both Kastor's list for Sparta and for Corinth.

The other and longer list may belong to Apollodoros or his school: it is reported as part of a system allowing 90 years to the prytaneis after Automenes, and a total of 447 years from the Return to Kypselos: 327 plus 90 = ~~447~~ 417, so that 30 years are to be allowed from the Return to the accession of Aletes. We then have:

30 years after the Return:	36 x ¾ +3 (1103-1074)
monarchy: 327 years:	36 x 9 +3 (1073- 747)
prytaneis: 90 years	36 x 2½ (746- 657)
Kypselos: 30 years (Hdt)	36 x ¾ +3 (656 - 627)
	36 x 13¾

APPENDIX V

Chronography of the Thalassocracies

1. The Armenian Chronographia and Kanones

The figures in these two books may be tabulated thus:

	Durations stated in the Chronographia		Durations stated in the Kanones	Placings in the Kanones (ann. Abr.)	Number of years giv by placings in Kan.
Lydia	92		92	848	80
Pelasgia	85		85	928	
Thrace	79	187			185
Rhodes	23				
Phrygia	25		25	1113	
Cyprus	33	103			
Phoenicia	45				173
Egypt					
Miletos					
Caria			61	1286	59
Lesbos			96	1345	96
Phokaia	44		44	1441	45
Samos			(16)	1486	17/18
Sparta	2		2	1503/4	
Naxos	10	12			10/12
Eretria	15		15	1514/5	16/17
Aigina	10		10	1531	3
Xerxes in Athens.				1534	
Plataia				1538	

1) The Kanones differ from the Chronographia by the following amounts for each thalassocracy: (-12), -2, (?), -2, (?), 0, +1, +1, 0, +1, (-7): that is, except at the termini, the discrepancies are very small.

2) At the upper terminus, the Armenian places the first year of Lydia at six years before Orestes, while Jerome places Lydia 1 in Aigisthos 2nd. These two notations mean the same thing when Aigisthos has 7 years.

3) The lower terminus: the Chronographia and Synkellos thus compare for the last four entries:

	Chronographia		Synkellos		
Sparta	2		12		
Naxos	10	27	10		
Eretria	15		7	27	39
Aigina	10		10		

Synkellos thus has two systematic periods ending in the last year, but the Chronographia has a systematic period ending 10 years before. This suggests that more than one systematic version of the thalassocracies existed.

We may note that the Armenian tradition includes the following periods:

Lesbos to Samos: 96(K) + 44(K,Chr) + 16(K) = 156 = 39 x 4
Phrygia to Caria: (1113 to 1286 =) 173 + 61(K) = 234 = 39 x 6

Whence we may conclude that the list is chronographically constructed, on the basis of 39-year generations. Consequently, it is probable that the last entries should comprise a 39-year period, and that the full list read:

Sparta	2		
Naxos	10	27	
Eretria	15		39
Aigina	10	27	
(Hellas	2)		

4) The chronographic intention therefore was a list of thalassocracies including the period when the allies' fleets ruled the Aegean, i.e. the next thalassocrat would be Athens, beginning in 477 B.C. The allies therefore represent the years 479 and 478, and Aigina ends in 480. Then the monadic Aigina 10th is also the year of Salamis and Plataia, the allies' first year is the year of Mykale and Sestos. The year of Plataia in the Armenian is 1538, and 1541 in Jerome: the Armenian calculates his thalassocracy dates from 1541, as may be shown:

Calculations from 1538		Calcualtions from 1541	years of the Armenian
1538		1541	
39		39	
1500	Sparta	1503	1503/4
156		156	
1344	Lesbos	1347	1345
234		234	
1110	Phrygia	1113	1113

Consequently the intended dates of the Armenian Kanones may be restored as follows:

Thalassocrat		Intended date	Year given
Lydia	92	834	848
Pelasgia	85	926	928
Thrace	79	1011	(1009-16: Jerome)
Rhodes	23	1090	-
Phrygia	25	1113	1113
Cyprus	33	1138	-
Phoenicia	45	1171	-
Egypt	-	1216	-
Miletos	-	-	-
Caria	61	1286	1286
Lesbos	96	1347	1345
Phokaia	44	1443	1441
Samos	16	1487	1486
Sparta	2	1503	1503/4
Naxos	10	1505	-
Eretria	15	1515	1514/5
Aigina	10	1530	1531
(Hellas	2	1540/41)	1534-8

Thus no date, other than the termini, is more than 2 years from that intended: the discrepancy is 2 years in three places, 1 year twice, and 0 four times (excluding the Thracian date of Jerome).

5) The lacuna may be tentatively filled by the following argument: the entries are arranged in groups which make up multiples of 39, as may be observed:

Phrygia 25
Cyprus 33 } 78 =
Phoenicia 45 } 39x2
Egypt
Miletos
Caria 61
} 234 = 39 x 6

Lesbos to Samos = 39x4
the rest = 39 x 1

Thus Phrygia, Egypt, Miletos, and Caria together make 39 x 4. No duration for Egypt is anywhere stated, and only Jerome gives a duration for Miletos of 17 or 18 years. Jerome's duration does not belong to his placings (which give 25/29 years), and should therefore refer to the Armenian series of numbers. The number 17 pairs with Caria's 61 to make 78 = 39 x 2, like the pair Cyprus and Phoenicia. We may then place Miletos (17) in this series, and Egypt is 78 minus the Phrygian 25 = (53). The list should then read:

Thalassocrat	Duration	Place given	Place intended	Date B.C.	
Lydia	92	6 year before Orestes	(834)	1185	
Pelasgia	85	928	926	1093	39x7+6
Thrace	79	(1009/16,J)	1011	1008	
Rhodes	23	-	1090	929	
Phrygia	25	1113	1113	906	
Cyprus	33	-	1138	881	
Phoenicia	45	-	1171	848	39 x 4
Egypt	(53)	-	1216	803	
Miletos	17(J)	-	1269	750	
Caria	61	1286	1286	733	39 x 2
Lesbos	96	1345	1347	672	
Phokaia	44	1441	1443	576	39 x 4
Samos	16	1486	1487	532	
Sparta	2	1503/4	1503	516	
Naxos	10	-	1505	514	
Eretria	15	1514/5	1515	504	39 x 1
Aigina	10	1531	1530	489	
Hellas	2		1540/1	479/8	

The list contains 708 years = 39 x 18 plus 6 years of Aigisthos, in the version of the Armenian as given by comparison of the Chronographia and Kanones. With 1185 B.C. as the upper terminus of a list which allegedly extends from Troy to Xerxes, the immediately available date for Troy is 1188, Kastor's date. This suggests that he had a two-year period at the top as well as the bottom of his list, covering the years 1187/6, and attributed perhaps to the Nostoi.

2. Jerome's thalassocracies.

If the accuracy of the Armenian Kanones (except at the termini) is any guide, Jerome's figures are so far out that he must have been using a different list of figures altogether. But he has some gross detectable errors:

a) Aigina at 1508/9 is given 20 years, although Xerxes/Plataia is dated 1535/6 to 1541, i.e. at least 27 years are required.

b) Thrace at 1045/55 is 79 years before Phrygia in 1123/5 (1123/5 minus 79 is 1044/6), and Pelasgia at 960 is 84/6 (85) years before Thrace: i.e. these two entries depend on an erroneous omission of Rhodes.

From the first error we may conclude that Jerome's list ended with a 27-year period, as does the end of the list preserved by Synkellos:

Sparta 12
Naxos 10
Eretria 7 } 27 } 39
Aigina 10

Thus, the two years of Hellas being omitted in this version, the dates will run: Sparta 519-508, Naxos 507-498, Eretria 497-491, Aigina 490-481 B.C.

From the second error we may conclude that Jerome's date for Phrygia 1123/5 is about where it was intended to be, and that he knew the Armenian's durations for Pelasgia and Thrace.

The great variability of Jerome'stexts makethe ascertainment of his chronographic periods difficult, and the following argument is much more tentative than in the case of the Armenian. We may first consider the list from Phrygia downwards, thus avoiding the Rhodian error in the upper part:

Thalassocrat	Given duration	Given date	Number of Years	Chronography
Phrygia	20 or 25	1123/5	25/30	/2
Cyprus	32 or 23	1150/3	26/31	1151 is 117
Phoenicia	45	1180/1	52/4	(27 x 4) yrs
Egypt	-	1233/4	33/6	before 1268/9
Miletos	17 or 18	1267/9	25/9	1268/9 is 78
Caria	-	1294/6	48/53	(39 x 2) years before 1346/7.
Lesbos	68 or 69	1344/7		Lesbos to Aigina is 161/5 years: this suggests 162 = 27 x 6 which wd limit Lesbos to 1346/7
Aigina	20	1508/9		
Xerxes		1535/6		27 x 1

In the instances above, only at Phrygia does the given duration correspond to a year count, and there the figure 25 occurs among the variants of each. The Cypriote 32 (duration) and 31 (year count) are near each other and the Armenian 33; Rhodes has 23 (duration) and 22/5 (year count), also corresponding to the Armenian. These three in the Armenian = 81 = 27 x 3 years, and in view of Jerome's tendency to 27-year periods, they may be part of his list too.

In the portion of the list above, Egypt is separated from Lesbos by a period which is a multiple of 39, so that if the list is a 27-year construct Phoenicia plus Egypt plus Miletos plus Caria should be a multiple of 27. From Phoenicia in 1180/1 to Lesbos in 1346/7 is 165/7 years, to which the nearest multiple of 27 is 162: this would bring Phoenicia down to 1184/5, which is rather far from the text (on the standards of the Armenian); but another 171 = 27 x 6 years gives us 1013/15, which corresponds to the Thracian date 1009/16.

On the basis of this supposed chronographic structure we may

now assemble Jerome's dates as follows from Thrace downwards:

Thalassocrat	Given place	Inferred duration	Intended place	Chronography
Thrace	1009/16	88	1015	Lesbos 27 x 12
Rhodes	1100/1	23 given	1103	27 x 3 plus
Phrygia	1123/5	25 given	1126	Phoenicia in
Cyprus	1150/3	33 Arm.	1151	1184, the
			117= 27 x 4	nearest chrono-graphic year to the text
Phoenicia	1180/1	49/50	1184	1184 = Lesbos
Egypt	1233/4	34/5	(1233/4))	plus 27 x 6
Miletos	1267/9	26/8	1268 } 78=	1151 plus 117
Caria	1294/6	50/2	(1294/6)} 39x2	
Lesbos	1344/7	69 given	1346	Naxos plus
Phokaia	-	(68 years up to the Samian tyranny, and the number is given as variant to Lesbos)	1415	27 x 6
Samos	1483 (tyranny)	(13 years from tyranny to Sparta)	(1483)	
Sparta	-	12 (Synkellos)	1496	
Naxos	1508/9 ("Aigina")	10 (...)	1508	Xerxes plus 27
Eretria	-	7 (...)	1518	
Aigina	-	10 (...)	1525	
Xerxes	1535		1535	

For Lydia, Jerome gives the date 841/2, and 842 is 27 x 9 2/3 years before Rhodes in 1103. This carries the 27-year structure right through the list, making a total of 27 x 25 2/3 = 693 years = 1173-481 B.C. This list is thus shorter than the Armenian by one third of a generation and the surplus 6 years, i.e. by 15 years. The Armenian begins Lydia in 848 (due to its Mycenaean reckonings): and 92 years later would be 940. At 939 the Armenian, and at 940 Jerome, notes an incursion of Kimmerioi and Amazons. It seems very likely that this "incursion" was intended to account for the end of the Lydian thalassocracy, and the beginning of the Pelasgian. Since the Armenian has the date 926 (928) for Pelasgia, the 940 date probably belongs in Jerome's series, for otherwise he only

has the erroneous 960. This completes the available evidence for Jerome's list, which now appears as follows:

Thalassocrat	Duration	Given place	Intended place	Date B.C.
Lydia	(98)	841/2	842	
Pelasgia	(75)	(940)	940	
	[[85]]	[[960]]		
Thrace	(88)	1009/16	1015	
	[[79]]	[[1045/55]]		
Rhodes	23	1100/1	1103	
Phrygia	25	1123/5	1126	
Cyprus	33	1150/3	1151	
Phoenicia	(49/50)	1180/1	1184	
Egypt	(34/5)	1233/4	(1233/4)	
Miletos	(26/8)	1267/9	1268	
Caria	(50/2)	1294/6	(1294/6)	
Lesbos	69	1344/7	1346	
Phokaia	68?		1415	
Samos	13?		1483?	
Sparta	12		1496	
Naxos	(10)	(1508/9)	1508	
Eretria	(7)		1518	
Aigina	(10)		1525 -34	

$27 \times 9\frac{2}{3}$ { 1173, 1075 } $39 \times 4\frac{2}{3} - 9$

{ 1000 } $39 \times 4\frac{1}{3}$

27×3 { 912, 889, 864 }

27×6 { 831, 782/1 } 39 × 3 ; { 747, 721/19 } 39 × 2 ; } 39×8

27×6 { 669, 600, 532?, 519 } 39×1.

27×1 { 507, 497, 490 ~~81~~ }

$27 \times 25\frac{2}{3} = 39 \times 18 - 9$.

APPENDIX VI

The Lists of Argos-Mycenae

1. Kastor in the Chronographia (with variants in SR and Kanones)

Inachos	50	
Phoroneus	60	215 =
Apis	35	27 x 8 -1
Argos	70	
Kriasos	54	
Phorbas	35	135 =
Triopas	46	27 x 5
Krotopas	21	32 =
Sthenelos	11	27 x 1+5
Danaos	50	
Lynkeus	41	
Abas	23	162 =
Proitos	17	27 x 6
Akrisios	31	
Eurystheus	45	27 x 1⅔
Atreus	65	
Agamemnon	30	163 =
Aigisthos	(10)	27 x 6+1
Orestes etc	58	

54 or 53 } in SRA and Kanones
35 or 34 } visibly a copyist's slip
47, 45, 46 or 48 } variously compensated

According to a note under the name of Agamemnon, Troy was taken in his 18th year, and according to Kastor's Athenian list, the last year of Menestheus (the usual regnal date of the fall of Troy) was 1188 B.C. Moreover, the Athenian rubric seems to presuppose a date for the Return in 1107 B.C. The Argive list and rubric give figures which in these circumstances should probably read:

Agamemnon's last 12 years: 1187-76
Aigisthos 1[7] years: 1175-66
Orestes to the Return: 58: 1165-08
Return to Ionia: 6<4> 1107-1044
Ionia to Ol.1: 267: 1043- 777

This is the most conservative treatment of the existing figures.

The rubric further gives the following figures for the chief periods of the dynasties:

f

from Inachos the Sthenelos:	382 years:	this agrees with the details
the Danaans:	162 years:	.. ..
Atreus to the Return:	105 years:	this seems to represent the period of 105 years from Atreus to the end of Aigisthos

The total given by the details is 752 years = 39 x 19⅓ -2. The deficient two years imply that Kastor also reckoned a subsequent period for Argos (now lost) which comprised a compensating period of 39x+2 years. The chronographic base dates are found in the century 550-450 B.C., and the only historically evidenced date for Argos in this period is the year 546, the year of the loss of Thyreatis. This is 561 = 39 x 14⅓ +2 after 1107 B.C., and so is probably Kastor's Argive base-date. His total span of Argive time is thus 1859-546 = 1313 = 39 x 33⅔ years.

2. The List of the Excerpta Barbari.

The period from Troy to the Return is thus stated:

Agamemnon's last	15 years
Aigisthos	7
Orestes	28
Penthilos	22
making a total of	72 years.

According to the EB's Athenian list as reconstructed in Appendix III above, the date of Troy is 1222, but the date on the corrupt list is 1215. From 1215 to 1143 is 72 years, and this gives EB's date for the Return: originally 1143 was the 80th year after 1222.

The rubric states that the regnal years from Inachos to the fall of Troy number 718, while the details make a total of 687 years. The list entirely omits the Perseid kings of Mycenae, so that we should probably insert <Eurystheus 31> years before Atreus.

The 790 years of the kings = 39 x 20 10. But the copyist had some doubts about the figure of 31 years for Krotopas, unsure whether to make it 10 years less. If his second thoughts were best, the total should be 780 years = 39 x 20, that is, the list formed a self-contained chronographic period.

Inachos	50	215 = 27 x 8 -1	
Phoroneus	60		
Apis	35		
Argos	70		
Kriasos	56	91 = 27 x 3⅓+1	
Phorbas	35		
Triopas	66	98 = 27 x 3⅔ -1	
Krotopas(corr)	21		
Sthenelos	11		
Danaos	(50)	91 = 27 x 3⅓+1	The figure for Danaos duplicates that for his daughters.
Lynkeus	41		
Abas	23	81 = 27 x 3	
Proitos	27		
Akrisios	31		
(Eurystheus	31)	69 = 27 x 2⅓+6	
Pelops	38		
Atreus	45	78 = 27 x 3 -3	
Agamemnon	33		
Aigisthos	7	57 = 27 x 2 +3	
Orestes	28		
Penthilos	22		

Total: 780 = 39 x 20

3. The list of the Chronographeion Syntomon

The stated total for Argos (Inachos to Akrisios) is 438 years; the dates anno Mundi 3514-3992 for the dynasty give a duration of 478 years, and the sum of the details is 478 years. The stated total for Mycenae is 332 years, and the sum of the details is 294 years. Thus in the Mycenaean portion the total gives 38 more years than the details, and the suggestion is that <Pelops 38> is counted in the total but omitted in the list. With this addition, the total number of years in 810 = 27 x 30, a closed chronographic period. The stated total of 438 years for Argos is therefore

an error. For the absolute dating see Appendix X below.

Inachos	50	
Phoroneus	60	147 =
Apis	35	27 x 5⅓ + 3
Argos	2	
Kriasos	54	
Phorbas	35	135 = 27 x 5
Triopas	46	
Krotopas	22	34 =
Sthenelos	12	27 x 1⅓ -2
Danaos	50	
Lynkeus	41	
Abas	23	162 = 27 x 6
Proitos	17	
Akrisios	31	
Perseus	59	
Sthenelos	32	136 = 27 x 5 + 1
Eurystheus	45	
(Pelops	38)	103 =
Atreus	65	27 x 3⅔+4
Agamemnon	18	
Aigisthos	8	93 =
Orestes	15	27 x 3⅓+3
Teisamenos	52	
Total:	810	= 27 x 30

APPENDIX VII

The Lists of Sikyon

1. Kastor and Jerome

Aigialeus	52	117 = 39 x 3	
Europs	45		
Telchin	20		
Apis	25	156 = 39 x 4	.....22 in SRA seems to be an error
Thelxion	52		
Aigyptos	34		
Thourimachos	45		
Leukippos	53	194 = 39 x 5 -1	.....26 in SRA
Messapos	47		49 in SRA, 45 in AK
Eratos	46		64 in SRA, AK
Plemnaios	48		28 in AK
Orthopolis	63	113 = 39 x 3 -4	
Marathonios	30		
Marathon	20		
Chyreus	55	160 = 39 x 4 + 4	
Korax	30		
Epopeus	35		
Laomedon	40		
Sikyon	45	.. ..	.....44 in SRA, AK
Polybos	40	137 = 39 x $3\frac{1}{3}$ + 7	.....42 in Jerome seems to be a genuine variant, for together with Zeuxippos 32 the total is increased by 3 years to 39 x $24\frac{2}{3}$ thus making a closed system.
Inachos	40		
Phaistos	8		
Adrastos	4		
Polypheides	31	82 = 39 x 2 + 4	
Pelasgos	20		
Zeuxippos	31		

Total: 39 x $24\frac{1}{3}$ + 10

The Chronographia states that the kings ruled 959 years (which is the true sum of the details), and that with the priests who succeeded the kings, the total is 998 years. Thus the priests occupy 39 years, but the list gives only 33, omitting any figure for Charidemos. We should therefore read:

Archelaos	1
Automedon	1
Theoklytos	1
Eunomos	6
Theonomos	9
Amphigyes	12
Charidemos	(6)

The rubric alleges that from Charidemos to Ol.1 is 352 years. But such a reckoning would place Polypheides (the contemporary of Troy) in the years 1249-1219, whereas Kastor's date for Troy (according to his Athenian list) is in 1188. We should then reckonin the ~~year~~ 352 years from the end of the kings, so that Polypheides has the years 1210-1179, which includes the years of Troy. The kings then cover the years 2087-1129, and the priests 1128-1090, so that the settlement of the Dorian Phalkes is, presumably, in 1089, 18 years after the Return in 1107, but identical with Ephoros' date for the Return; and 13 years, probably, before the Kastorian accession of Aletes in Corinth.

The upper terminus of Kastor's Sikyon is 2087, which is 1404 (LCM of 39,36,and 27) years before 683 B.C.

2. The list of the Excerpta Barbari.

The list is introduced by a quotation from Africanus, saying that the rulers of Sikyon lasted 1007 years; from their "minishing" to Ol.1 was 329 years; so the total span calculated was 1336 years. At the end of the list the figure of 1336 is repeated, but the period ending at Ol.1 is said to be 327 years. In spite of these figures, the list has only 966 years of kings.

The figure of 1007 years is the difference between the anno mundi dates given in the Syntomon for the beginning of Sikyon and the accession of Aletes at Corinth, so that this was probably the period intended by Africanus.

Kastor's upper date of 2087 B.C. for Sikyon is fixed on mathematical considerations, and in the absence of another

contemporary Greek dynasty (which would make a Model possible) it is difficult to see how else the upper terminus could be fixed, except by a simple generation count of the 26 kings, which the Barbarus does not use (his royal total is 39 x 24⅔ +4). If therefore we assume that his source also had 2087 for the Sikyonian upper terminus, the priests began in 1121, and lasted only 28 years, so that Phalkes acceded in 1093. The 1007 years end in 1081, so that Aletes should accede in 1080: the dates are thus:

2087 Sikyon begins
1121 priests begin
1093 Phalkes accedes
1081 last of the 1007 years
1080 Aletes accedes, 327 years before 753.

Thus we seem to have a maintenance of the historical concepts used by Kastor (the end of Corinth is equated with the generation ending in 754), but by Africanus' time the end of Corinth is equated with the more obvious historical epoch of Ol.1, and the accession of Aletes with the Apollodoran Return.

The Barbarus has a note at the end of the kings that up to Zeuxippos they lasted 581 years. This is the period from Africanus' exodus in 1796 to Troy in 1215 as determined by the corrupt Attic list of the Barbarus.

The analysis of the kinglist is as follows:

Aigialeus	52	
Europs	45	117 = 39 x 3
Telchin	20	
Apis	25	
Thelxion	52	156 = 39 x 4
Aigyros	34	
Thourimachos	45	
Leukippos	53	
Messapos	47	195 = 39 x 5
Eratos	46	
Plemnaios	49	
Othopolis	65	
Marathonios	30	115 = 39 x 3 -2
Marathon	20	
Chyreus	55	
Korax	20	
Epopeus	35	153 = 39 x 4 -3
Laomedon	43	

Sikyon omitted: his absence is ompensated by the long reign given to Phaistos

Polybos	45	(misplaced)
Inachos	45	
Phaistos	50	144 = 39 x $3\frac{2}{3}$ +1
Adrastos	4	
Polypheides	31	
Pelasgos	20	86 = 39 x 2 +8
Zeuxippos	35	

28 years of priests:

Archelaos	1
Automedes	1
"Methudutus"	1
Euxneos	4
Theonomos	1
Amphigyes	(1)8 (so Exc. Eus.)
Charidemos	1

3. The list of the Chronographeion Syntomon

As already noted, the period from the beginning of Sikyon (aM 3264) to that of the beginning of Corinth (aM 4271) is 1007 years, the period quoted from Africanus by the Barbarus.

The total of the details is 952 years, but the stated total is 759, while the dates given are aM.3264-4023. For these figures seem Appendix X below. The analysis of the list is:

Aigialeus	52	
Europs	45	117 = 39 x 3
Telchin	20	
Apis	25	
Thelxion	52	151 = 39 X 4 -5
Aigyros	34	
Thourimachos	40	
Leukippos	53	
Messapos	47	197 = 39 x 5 + 2
Eratos	49	
Plemnaios	48	
Orthopolis	63	
Marathonios	30	113 = 39 x 3 -4
Marathon	20	
Chyreus	58	
Korax	30	156 = 39 x 4
Epopeus	32	
Laomedon	36	
Sikyon	44	
Polybos	45	
Inachos	42	143 = 39 x 3 2/3
Phaistos	8	
Adrastos	4	
Polypheides	29	
Pelasgos	16	75 = 39 x 2 -3
Zeuxippos	30	

Total: 39 x 24 1/3 + 3

Assuming an upper terminus of 2087, the priests begin in 1135 and end in 1103, allowing the accession of Phalkes in 1102. Thus the list seems to have been an adaptation of Kastor's list to suit the date of the Apollodoran Return.

APPENDIX VIII

Mesopotamian Chronography

1. Kastor (i = Chronographia, ii= Series Regum, iii = Kanones)

1.	Ninos	52	94 = 27 x 3⅓+4
2.	Semiramis	42	
3.	Zames Ninyas	38	108 = 27 x 4
4.	Arios	30	
5.	Aralios Amyros	40	
6.	Xerxes Balaios	30	187 = 27 x 7 -2
7.	Armamitres	38	
8.	Belochos	35	
9.	Balaias (i.22)	52	
10.	Altadas	32	
11.	Mamithos	30	110 = 27 x 4+2
12.	Machchalaios	30	
13.	Spheros (i.22)	20	
14.	Mamilos	30	
15.	Sparethos (iii 39)	40	125 = 27 x 4⅔ -1
16.	Askatades	40	
17.	Amintas	45	
18.	Belochos (i.45) Tratres i.17 iii. 7	25	137 = 27 x 5 +2
19.	Bellepares	30	
20.	Lamprides	32	
21.	Sosmares (i.8)	20	
22.	Lampares	30	
23.	Pannias (i.42)	45	163 = 27 x 6 +1
24.	Sosarmos	19	
25.	Mithraios (ii.37)	27	
26.	Teutamos (iii.31)	32	
27.	Teutaios	40	
28.	Thineus	30	108 = 27 x 4
29.	Derkilos	40	
30.	Eupalmes	38	
31.	Laosthenes	45	208 = 27 x 7⅔ +1
32.	Peritiades	30	
33.	Ophrataios (ii, iii:20)	21	
34.	Ophratanes	50	
35.	Akrazanes	42	
36.	Sardanapalos	20	
(37.	Ninos II	19)	27 x ⅔+1

Eusebius calls Teutamos the contemporary of Troy, but on Kastor's dates it is Teutaios who reigns 1213-1174, and is contemporary with Troy in 1188.

i. Altogether 1300 or 1240 years
ii, iii: Altogether 1240 years.

Total: 27 x 46⅔ -1: 2087-829 B.C.

2. Mesopotamian Chronography of the Syntomon: (a) Babylonia

Kingdom of the Chaldaioi

They ruled 216 years, beginning a.M. 2822:

Nebroth	70	216 = 32 x 6¾
Chomasbelos	15	
Pyros	20	
Nechoubes	25	
Nablios	30	
Onibalos	35	
Zinzeros	21	

until a.M. 3037.
Their kingdom passed to the Arabes.

Kings of the Arabes

They ruled 200 years, beginning a.M. 3038

Mardokeparos	45	200 = 32 x 6¼
(Nabios)	23	
(Mardokos)	40	
Parenos	37	
Hosimordakos	30	
Nabonabos	25	

until a.M. 3238
Their kingdom passed to the Assyrioi (who began a.M.3239)

Kingdom of the Babylonians

They ruled 17(6) years, beginning a.M.4745

Baladam	19	176 = 22 x 8
Marathios Baladam	31	
Moges	20	
(Kondlinos	19)	
Naboupallasaros	20	
Nabouchodonosor	44	
Marodak	22	
Baltasar	4	
(Nabondinos	17)	

The kingdom of the Babylonians was taken by the Persians in the "16th year of Dareios of Persia" (see below, 411-X)

(b) Assyria, Media, Persia

Kings of the Assyrioi

They ruled 1(4)41 years, beginning a.M. 3239

1.	Belos	25	119 = 27
2.	Ninos	52	x 4⅓ + 2
3.	Semiramis	42	
4.	Ninyas	38	109 = 27
5.	Arios	30	x 4 + 1
6.	Aralos	41	
7.	Xerxes	26	113 = 27
8.	Belochoos	35	x 4⅓ -4
9.	Baleos	52	
10.	Aldatas	32	82 = 27
11.	Mamythos	30	x 3 +1
12.	Bachchaleos	20	
13.	Spheros	24	54 = 27
14.	Mamylos	30	x 2
15.	[illegible]		
	Parethos	42	127 = 27
16.	Askatades	40	x 4⅔ +1
17.	Amyntas	45	
18.	Belochoos	25	134 = 27
18a.	(Atossa	17)	x 5 -1
19.	Balatores	30	
20.	Lanparides	32	
21.	Lanpares	30	
22.	Pannias	45	126 = 27
23.	Sosarmos	22	x 4⅔
24.	Mithreos	27	
25.	Teugamos	32	
26.	Teutaios	40	139 = 27
27.	Sarbelos	23	x 5 + 4
28.	Chalaos	40	
29.	Anebos	36	
30.	Abios	38	109 = 27
31.	Theneus	31	x 4 + 1
32.	Therkyllos	40	
33.	Eupagmes	38	112 = 27
34.	Laosthenes	44	x 4 + 4
35.	Peritiades	30	
36.	Ophratanes	29	121 = 27
37.	Ophratanes	50	x 4⅓ + 4
38.	Akrapaxan	42	
39.	Sardanapalos	20	67 = 27
40.	Ninos	{10}	x 2⅔ + 4
41.	Phoula	14	
42.	Theglaphassa	23	
43.	Selmanasar	15	46 = 27
44.	Senachereim	16	x 1⅔ +1
45.	Assorom	15	

Abios seems to be the Babios of Teutamos II of Synkellos, and so contemporary with Troy

Total: 27 x 54

The Kingdom of the Medes

They ruled for 25(4) years, beginning a.M. 4692

Ardakes	28	
Mandaukes	20	
[Tyrimeas 38]		108 = 27 x 4
<Sosarmos	30>	
Artykas	30	
Diokes	52	
Phraortes	24	146 = 27 x 5⅓ + 2
Kaxaris	32	
Dareios	38	
(Astyages)		

The kingdom of the Medes was taken by the Persians a.M. 4947 and the Persians began to rule a.M. 4948,(Kyros 32 years, Kambyses ~~x~~ 8, Smerdios 1, and Dareios 36.)

For the absolute dates, see Appendix X below.

3. The Assyrian and Median lists of the Excerpta Barbari

"The Medes reigned for 269 years, and Kyros transferred the empire to Persia at the beginning of Ol.55. Now up to Ol.54 is 216 years, and ~~(5)3~~ (5)3 years before Ol.1 we find the beginning of the Median kingdom.....

Arbakes	28	
Sosarmos [4]	<30>	121 = 27 x 4⅓ + 4
Mamythos	40	
Kardykeus	23	
Diykos	54	
Phraortes	24	148 = 27 x 5⅓ + 4
Kyaxaros	32	
Astyages	38	

These Median reigns lasted for 269 years, from....53 years before Ol.1. But it finished in Ol.54, in the 38th year of Astyages, whom Cyrus the Persian ended in Ol. 54. And the kingdoms of the Lydians and Medes were destroyed in the time of Cyrus of the Persians".

The 269 years = 53 years before Ol.1 : 829-777
216 olympic years: 776-561
561 = Ol.54.4, Astyages ends.
560 = Ol.55.1, Kyros begins.

The Assyrians:

Belos	62	156 = 27
Ninos	52	x 5⅔ + 3
Semiramis	42	
Zinas	38	138 = 27
Arios	30	x 5 + 3
Aranos	40	
Xerxes Balleus	30	
Armamithros	38	160 = 27
Belochos	35	x 6 -2
Balleus	52	
Altallos	35	
Mamithos	30	115 = 27
Magchaleos	30	x 4⅓ -2
Spheros	20	
Mamithos	35	
Spareus	40	212 = 27
Askatagos	40	x 8 -4
Amyntas	50	
Atossa Semiramis	23	
Belochos	25	
Belleroparos	34	
Lamprides	32	82 = 27
Sosaros	20	x 3 + 1
Lamparos	30	
Pannios	45	100 = 27
Sosarmos	20	x 3⅔ +1
Mithreus	35	
Tautalos	32	72 = 27
Euteus	40	x 2⅔
Thineus	30	108 = 27
Kerkillos	40	x 4
Eupalos	38	
Laostenos	45	234 = 27
Peritiades	30	x 8⅔
Ophrateus	20	
Ophratanos	50	
Akrapazos	40	
Thonos		
Konkoleros		
Sardanapalos	30	
Ninos	19	

Altogether 39 kings lasted 1430 years, from whom to Ol. 1 was 67 years.

(Total: 1377 years = 27 x 51)

4. Median lists of Eusebius: (a) Chronographia (= Syntomon)

Warbakes	28	108 = 27 x 4
Maudakes	20	
Sosarmos	30	
Artikas	30	
Deiokes	54	146 = 27 x 5⅓ + 2
Phraortes	24	
Kyaxares	32	
Ashdahak	38	

The Median empire lasted 298 years.

(b) Series Regum and Kanones

Arbakes	28	111 = 27 x 4 + 3
Sosarmos	30	
Mandakes	40	
Artikas	13	
Deiokes	54	146 = 27 x 5⅓ + 2
Phraortes	24	
Kyaxares	32	
Astyages	38	

APPENDIX IX

Lydian Chronography after Herodotus

The non-Herodotean Lydian list of kings is one of the most obscure documents in Greek chronography. There is no external evidence for its origin or author, and it appears in two variants, one 13 years shorter than the other; moreover, only two out of seven texts agree completely in the figures; and evidence for precise absolute dating is very confused. The lists may be summarised:

	Longer chronography					Shorter chronography	
	Synt.	EB.	AK.	JK.	SRA.	Chronogr.	SRJ
Ardys	36	36	36	36	36	36	36
Alyattes	14	14	14	14	14	14	14
Meles	12	12	12	12	12	12	12
Kandaules	17	17	17	17	17	17	17
Gyges	36	36	36	36	36	35	35
Ardys	38	38	38	37	48	37	37
Sadyattes	15	15	15	15	15	5	15
Alyattes	49	49	49	49	45	49	44
Kroisos	16	15	15	15	15	15	15
	39 x 6 -1	-2	-2	-3	+4	39 x $5\frac{2}{3}$ -1	+4

The Syntomon dates the fall of Kroisos to the 15th year of Kyros, and the EB adds precise numbers which give the absolute date of 545 B.C. Since EB and AK agree on the figures of reigns, and the Syntomon is very near (merely adding one year to Kroisos, which may easily be canonographic), we should perhaps take it that the source counted 545 as the 15th year of Kyros, making him accede in 559 B.C. Gyges then accedes in 697, and the list begins in 776 B.C.

The shorter chronography seems to be a deliberate alteration of the longer, working from two variants: the Chronographia version is 13 years shorter than the Syntomon, and SRJ is 13 years shorter than SRA. Thus it would appear that there were two historiographic views variously treated by the canonographers, and that SRJ is likely to be an imitation of the prinicples used by the author of the list of the Chronographia. Assuming that the author of the Chronographia list maintained the same lower terminus (545 = Kyros 15th), his upper date was 764, and his date for Gyges 685 (=the Herodotean date for Ardys).

From evidence on the thalassocracy lists, the longer list seems

to be attributable to Kastor, whose work often appears in the EB; and the shorter list to be due to the author of the version of the thalassocracy list which appears in Jerome.

The analysis of the two apparent master-lists in these traditions is:

Ardys	36	79 =		36	79 =
Alyattes	14	39 x 2 + 1		14	39 x 2 + 1
Meles	12			12	
Kandaules	17			17	
Gyges	36	89 =		36	77 =
Ardys	38	39 x 2⅓ -2		37	39 x 2 -1
Sadyattes	15			5	
Alyattes	49	64 =		49	64 =
Kroisos	15	39 x 1⅓ -1		15	39 x 1⅓ -1
Totals:		39 x 6 -2			39 x 5⅔ -1

APPENDIX X

Absolute Dates in the Syntomon and Excerpta Barbari

A. The Syntomon: i. Asiatic material

The Asiatic dates may be determined by assuming that Dareios acceded in 521 B.C., for then aM 4948, the year of the accession of Kyros, is, according to the Persian list, equivalent to 562 B.C. If we take only the aM dates for the Asiatic dynasties, we then have the equivalences:

Dynasty	Dates aM	Dates B.C.
Chaldaia	2822 - 3037	2688-2473
Arabia	3038 - 3238	2472-2272
Assyria	3239 -	2271-(830)
Babylonia	4745 - 4920	765- 590
Media	4692 - 4947	818- 563
Lydia	4730 - 4960	780- 550
Persia	4948 -	562-

There are some errors, some discrepancies, and some doubts about the chronography of these datings. We may first examine the errors and discrepancies, working backwards from Persia.

Persia and Lydia: Lydia is said to have fallen to the Persians in the 15th year of Kyros, aM 4960. But since Kyros acceded in aM 4948, his 15th year was aM 4962, and this date is also needed by the stated duration and total details of the Lydians, 233 years beginning in aM 4730. The date of Kroisos' last year is therefore 548 B.C., and the Lydian dates are 3 years earlier than those we have attributed to Kastor because of the long reign given to Kyros by the Syntomon.

Persia and Media: The last year of Dareios-Astyages is aM 4947, and the first year of Kyros is 4948: so that the two years are 563 and 562: this is normal monadic reckoning. The stated total

for the Medes is 255 years beginning in aM 4692: the lower date 4947 is 255 years later, i.e. it allows 256 regnal years. Moreover the total details only amount to 254 years. Consequently either 2 years are missing in the details, or 2 years are surplus in the aM dates.

Babylonia and Media: The fall of Babylonia is placed in aM4920, which is said to have been the 16th year of Dareios of Persia. This king must be intended for Dareios-Astyages of Media, whose 38th and last year was aM 4947. His 16th year was aM 4925: aM 4920 was his 11th year. The aM date rather than the regnal year is supported by the stated duration of 175 years beginning in aM 4745, for the total details give 176 years, beginning and if these began in aM 4745, they would end in aM 4920. The dates for Babylonia are therefore B.C. 765-590, which is 51 years too early at the lower terminus in comparison with the true date. The retrodating is due to the historiography of Baltasar and Dareios the Mede.

Media and Assyria: According to the aM dates and the total of Assyrian regnal years in the text, there is a gap of 54 years between the end of Assyria under Assorom (=Esarhaddon) and the beginning of Media under Arbakes. This cannot have been the intention of the chronographic source, for Arbakes was the destroyer of Assyria, and the dating must be due to the combination of termini from other sources, leading to a considerable retrodating of the whole Assyrian list.

Chaldaia and Arabia: The 216 years of Chaldaia are properly represented in the inclusive dating aM 2822-3037, but the 200 years of Arabia are reckoned exclusively aM 3038-3238, so that a surplus year is added.

Chronography of the dynasties

There is internal evidence in the lists of names of the Chaldaians, Arabs, Assyrians and Babylonians that the source of the Syntomon was learned in both Mesopotamian and Biblical tradition. He would therefore be aware of the statements that Sardanapalos was destroyed by Arbakes, and of the relationships of "Phoula" and his successors to Hebrew history. We may therefore be sure that the Assyrian terminus in 830 was not his. We should perhaps conclude that he equated Sardanapalos' last year with Arbakes' 1st, which, as we have seen, was either 818 or 816 B.C. According to the present text of the Syntomon, Sardanapalos' last year was the 1348th of the Assyrian kings, who lasted in all 1441 years: on these figures therefore the dates for Assyria would be x 2164 or 2162 to 724 or 722 B.C.

But reports of the very long lists of Assyrian kings (of which this is one) make Sardanapalos' son the 41st Assyrian king, and Sardanapalos therefore the 40th. In this list however he is only the 39th, and Tratres (Atossa Semiramis) is missing. It seems probable therefore that her name should be inserted; the regnal years given to her are 7 or 17 (Eus) or 23 (EB), so that the total regnal years for Assyria are 1448, 1458, or 1464. Of these, the number 1458 is a chronographic period, being 27 x 54, and it gives the upper terminus for the Chaldaioi of 2598 or 2596: the chronographic period of 39 x 54 is 2106 years, and 2106 years after 2596 B.C. is 490, the year of Marathon and the first clash of Persia and Greece. These mathematical relationships cannot be accidental; and we may therefore conclude that

1) the Median upper date was 816 B.C.
2) the Assyrian upper date was 2180 B.C., and <Atossa 17> should be inserted in the list to give a total of 1458 = 27 x 54 regnal years.
3) the upper terminus of the system as a whole was 2596 B.C., the 2106th years before Marathon.

We therefore have:

Dynasty	Total details	Date B.C.
Chaldaia	216 = 32 x 6¾	2596-2381 : 2596 = 490+39 x 54
Arabia	200 = 32x 6¼	2380-2181
Assyria	1458 = 27 x 54	2180- 723
Babylonia	176 = 22 x 8	765- 590 :
Media	254 = 27 x 9⅓+2	816- 563
Lydia	233 = 39 x 6 -1	780- 548
Persia	562 B.C. = 490+27 x 2⅔	562-

On this dating of the Assyrians, Abios' regnal years are 1177-1140 B.C. Consequently, if this chronography was ever used by one who agreed with Synkellos that Babios or Teutamos II was the contemporary of Troy, his Troy must have fallen in those years. According to the aM dates in the text, Abios would reign 1284-1247 B.C. (This agreed with the date for Troy, 1270, given in the Herodotean Life of Homer, and also reckoning from the base-date of 490 B.C.)

ii. Greek material

In contrast with this Asiatic material, the Greek is carelessly treated, and less certainly interpretable. The argument proceeds as follows:

The 75 years from Troy to the Return may reflect the use of the era dates 1182 for Troy (Eusebius) and 1107 for the Return (Kastor). Then there would follow:

Argos:	478 years:	1917-1440: aM.3514-3992
(Pelops	38 ..	1439-1402: aM not stated)
Mycenae	294 ..	1401-1108: .. .. ..

The last year of Mycenae is called the 30th of the Philistines;

the 1st year of Eurysthenes is called the 3rd of the Philistines, and the 1st year of Aletes the 15th of the Philistines: the figures suggest the mends <14th> (IΔ for Λ), <13th> (IΓ for Γ), and 15th. This would mean that Sparta begins the year before Mycenae ends: we may compare the Apollodoran scheme, in which the first Spartan generation begins in 1104 (=last year of Mycenae), and the reign begins with the Return in 1103. The analogy is supported by the fact that the sum of listed details in the Syntomon's Sparta is 325, while the stated total is 324. The dates intended therefore seem to be one year before the Return, followed by 324 regnal years:

Sparta begins 13th year of the Philistines, aM 4269 = one year before Mycenae ends: 1109 B.C.
ends 3rd year of Athaliah aM 4593: 325th year: 785 B.C.

This reckoning differs from the Apollodoran in that Apollodoros identifies the year of the end of Mycenae and the year before the Return, whereas here the year of the end of Mycenae is the year after Sparta begins, so that Sparta begins 2 years before the Return, i.e. the Return occurs in the 3rd year of the first generation of Sparta (whereas the Apollodoran Return is in the 2nd year of the generation), as though the last year of Mycenae was the year of, not the year before, the Return. We may suppose therefore that the intended Spartan dates were:

Sparta, 325 years, of which
1 before the Return: 1108 aM 4269
324 from the Return: 1107-784 -4593

A similar problem arises with the Corinthian dates, which are:

Corinth begins 15th year of the Philistines: aM 4271
ends 6th year of Athaliah: aM 4595

According to the aM dates, Corinth begins and ends 2 years later

than Sparta; according to the Hebrew dates, she begins 2 years later and ends 3 years later. Thus the duration in aM years is 325, in Herbrew years 326, and according to the sum of listed details 327, while the stated total is 323 years. These various numbers may perhaps be explained as follows: 327 years are listed, of which 3 belong before Aletes succeeds, and 324 are regnal years. The 324 appear as 323 in exclusive reckoning, and the 6th year of Athaliah isan error in arithmetic for the fifth. We may then date:

Corinth: 327 years, of which
3 before Aletes succeeds: 1108-1106 (aM 4269-) 4271
324 regnal years: 1105- 782 -4595

Sikyon begins aM 3264, which is 1007 years before Corinth. This figure appears in the Excerpta Barbari, where Africanus is quoted for the statement that Sikyon lasted 1007 years, whence to Ol.1 was 329 or 327 years. The aM date in the Syntomon for the beginning of Sikyon is therefore confirmed, and when aM 4271 = 1106 B.C., aM 3264 = 2113 B.C. But (on EB's figures) 329 plus 1007 = 1336, and 1336 is the total stated: 776 plus 1336 = 2112 B.C.: so that aM 3264 = 2113 B.C. is a year earlier than the earliest possible date on the EB's figures. Consequently we may infer here an error following on the Corinthian confusion in the Syntomon, so that the upper terminus of Sikyon should be 1007 years before 1105 B.C. (=the accession of Aletes), and appear as aM 3265 = 2112 B.C.

The total of the Sikyonian details is 952 years, which would give the last year as 1161 B.C. The stated total is however 759 years, and the aM date at the end of the list conforms: aM 4023.

There is a similar short reckoning in the EB list of Sikyon, where an isolated note gives the kings 581 years. This 581 years seems to be the period from the Exodus to Troy on EB's reckoning, 1796-1215, counting exclusively. The period of 759 years in the Syntomon then probably referred in origin to a similar period, and 759 years before Troy in 1182 is 1941 B.C., a year 145 years before the Exodus: in the chronology of Africanus, this is the year of the death of Joseph. We may therefore infer that for the Sikyonian absolute dates, the Syntomon and EB both derive from Africanus, who noted in relation to Sikyon and Troy the dates of Abraham, Isaac, Jacob (EB), the death of Joseph (Syntomon) and the Exodus. The compiler of the Syntomon found in his source only a note of the death of Joseph, and misunderstood the period in the same way as the Barbarus misunderstood the period from the Exodus to Troy.

The Athenian list in the Syntomon is very battered, omitting entirely the names of Apheidas and Medon, and showing in its spellings complete unfamiliarity with the traditions. It has been examined for chronographic structure in Appendix III above. It remains to be noted here that in order to obtain from it a date for Troy in 1182, the omissions are to be maintained, the corruption of Oxyntes [[31]] to be mended to <14> as already suggested, and a further 9 years = 27 x ⅓ have also to be removed: this last of course is not revealed by mere chronographic analysis. It may be suggested that Aischylos 23 is a well-meaning but erroneous "correction" for Aischylos <14>, a figure reported by Synkellos, and therefore known about the time of the compilation of the Syntomon.

We may now tabulate the absolute dates of the Greek dynasties:

Sikyon:	2112-(1161):	2112 = 519 + 27 x 59 (the beautiful number)
Argos:	1917-1440	: } 810 years = 27 x 30
Mycenae:	1439-1108	}
Athens:	1506- 684	: 1506 = 480 + 27 x 38
Sparta:	(1108) 1107-784	
Corinth:	(1106) 1105-782	

Three different sources are indicated by the aM dates, of which Sikyon, Sparta and Corinth go back to Africanus. The battering of the Athenian list suggests that the source of the Syntomon made some attempt to relate all the lists to a Troy in 1182 B.C., retaining the aM notations of his authorities. The omissions of names, aM dates for Mycenae and the beginning of Athens, misspellings, and occasional debris of learning (e.g. the beginning of Sparta at the generation, not the reign) indicate a pedagogic source, vastly different in quality from the Asiatic original. If the Assyrian dynasty was ever used to synchronise with a Troy in 1182 in the reign of Abios, all its dates should be five years higher at least, i.e. 2185 -728 B.C.: the year 2185 is 1404 years (cf. Kastor) before 781, the first year of the republic at Corinth on the dating of the Syntomon.

B. The Excerpta Barbari

The compilation of the Syntomon is dated by its papal and Mesopotamian lists a year or two after 817 A.D. The Excerpta Barbari continues its list of Roman emperors down to Anastasius, emperor of the east, 491-518; but the last dated emperor is the usurper Basiliskos, 476-8. The manuscript belongs to the eighth of end of the seventh century. The compiler was not interested in

non-Biblical Asiatic history, but his source for Greece is much better than that of the Syntomon.

Assyria: the details total 1377 = 27 x 51 years, and the stated total is 1430 years, a difference of 53. From this it may be inferred that at some stage the list was dated to begin 1430, and end 53, years before Ol.1, i.e. 2206-830 B.C. But the Barbarus reckons Troy 1215 on his Athenian list, which is the last year of Teutamos when the Assyrian list is dated 2210-834, so that this is at variance with the evidence from the appearance of Ninos II and the equation of Troy with the name of Teutaios that the list is a derivative of Kastor's. The final stage in the development of the figures is represented by the statement that the end was 67 years before Ol.1 This familiar figure which seems to come origianlly from Ktesias, and appears in Eusebius' rendering of Abydenos, will have taken its place in the notice as a "correction" of the figure of 57 = 834-776 B.C. It appears probable that originally Sardanapalos ended in 829 = Arbakes 1st, so that the upper terminus would be 2185 = 781 plus 1404. We have already seen reason to suspect that such a dating may once have been applied to the Syntomon list, and this further evidence of the relationship between the Syntomon and EB is in accord with the common descent of some of the material from Africanus.

Media is given 269 years, 53 before Ol.1 and 216 Olympic years, ending in 561, the year before Kyros' accession. The upper terminus is therefore 829, and we have seen that this probably means that here we have Kastor's list for Media.

Lydia is dated as beginning at the start (in principio)of Ol.1, which should mean 776 B.C., so that it ends in 545, Ol.58. 4 . The regnal year of Kyros is not mentioned, but it is unlikely that it was not the usually accepted 15th year, and since the EB credits Kyros with only 30 years, and omits pseudo-Smerdis, it probably reckoned Kyros' accession in 559: his 15th year would then be 545, so that Lydia should begin in 776 B.C. These two sets of figures therefore agree, but the Median list is evidence for the accession of Kyros in 560, which would raise the figures one year higher, and give 777-546. The Armenian Kanones, which repeat the EB's list for Lydia, show confusion in the upper terminus for the Lydian list, so that there seems to have been genuine doubt among the canonographers as to the correct placing of the list. On the whole, the variants of the Lydian list suggest as we have seen in Appendix IX, that the original (i.e. Kastor's) dated Kyros to 559 and the fall of Sardis to 545: if so, the competition of the Apollodoran date for Sardis, 546, may well have caused the confusion. But if we take this as the explanation, it follows that the Medes should end in 560 and begin in 828, i.e. that Kastor reckoned the years of Arbakes as imperial years, beginning the year after the end of Assyria: see further Apb. XI.

The three mythic Greek dynasties of the Excerpta are all dated with reference to the Exodus in 1796, Africanus' date. At Sikyon, this year is equated with Leukippos 43rd, giving an upper terminus of 2111 B.C., too late by one year for the periods calculated from Ol.1., i.e. the exodus should be dated to when Leukippos had completed 43 years, that is, his 44th year.

At Argos, the Exodus is dated to the 55th year of Phoroneus, which gives the upper terminus of 1900 B.C. Troy however is in Agamemnon's 18th year = 1215 according to the corrupt Athenian list, so that the upper terminus should be 1901. Thus Phoroneus 55th should be 56th, and we should infer the same miscount as at Sikyon.

At Athens, the corrupt list, reading 13 years for Aischylos from Ol.1, gives 1215 for the last year of Menestheus and the fall of Troy. This corruption is due to the misplacement of Thersippos (see Appendix III½ above) and seems to be old, giving rise to the 14 years of Aishylos in Synkellos and the <14> years of the Syntomon. Since it gives the false date of Troy, it is one of the basis for the dating throughout the Excerpta, leading also to the misplacing of the Assyrian list and the subsequent "correction" in the rubric thereto, as well as the 581 years in the Sikyonian list, and its subsequent false application to the regnal years. The Exodus dating of the Athenian list makes Kekrops' 1st year the 208th year of the exodus = 1589 B.C., which agrees with the totals stated of 814 years counted as ending in 776 B.C. and 907 years ending in 683, as well as the stated 492 years up to Medon, who therefore begins in 1097 so that Demophon accedes in 1214, the year after Troy in 1215. In this instance therefore the year count from the Exodus is correct.

The dates for the two post-heroic dynasties in Sparta and Corinth are less easily found. The reckoning in the Mycenaean list of 72 years from Troy to the Return dates the Return in 1143 (its pre-Apollodoran date according to the Chronographic

Model and "in the 80th year" after a Troy in 1222, the original date in the Athenian list.) The absolute dates for Sparta and Corinth are given as follows:

Sparta: 325 regnal years ending in Ol.1 The kings began in Saul 20th and ended in 1st Ahaz = Ol.1 (The list follows, then) Altogether 350 regnal years. (The actual total of details is 370 years.)

Corinth: begins Eurysthenes 2nd, lasts 323 years: these 323 years contemporary with the Spartan years from Eurysthenes 2nd. (The list follows, then) Corinth began Saul 31st and ended Joatham 15th (i.e. 2 years before Ahaz 1st.)(The actual total of details given is 324 years.)

The first year of Ahaz is also the first year of Lydia, which we have seen is 776 B.C. The first of the 325 years of Sparta is then 1100 B.C. The 15th year of Joatham is then 778, so the first of the 323 (exclusively reckoned) years of Corinth is 1101 B.C.: but if Eurysthenes 1st is 1100, Eurysthenes 2nd is 1099. If we bring in the 1007 years of Africanus fromtthe beginning of Sikyon in 2112, then Aletes 1st is 1106 or ~~0005~~ 1105, and Eurysthenes' 1st is 1107 or ΦΦ06. Thus the Africanus period of 1007 years implies the use of Kastor's list for Sparta. It appears therefore that the rubrics give two dates for Sparta and Corinth, one 1100-776 for Sparta and 1099-777 for Corinth, the other 1107 and 1106 for the respective upper termini. To this we must add a third, reckoning Alextes 1st = Saul 31st = Eurythenes 12th which appears also in SRA, and is probably a copyists' error (ἐν τῷ ιβ' for ἐν τῷι β'

We may therefore tabulate the dates of the EB lists as follows:

Assyria: intended date 2210-834 B.C., also previously dated 2206-830 and 2185- 809. Of these, 2206 = 559 (Kyros) plus 27 x 61, and 2185 = 781 plus 1404 (cp. Syntomon and, for the period of 1404 years, Kastor.)

Media: 829-561 B.C.: Kastor's list, originally dated 828-560

Lydia: 776-545: Kastor's list, with Sardis one year later than Apollodoros.

Sikyon: 2112-1106: 2112 = 519 plus 27 x 59

Argos: 1901-1144: originally 1923-1144 (see Appendix VI): 1923 = 1143 plus 39 x 20

Athens: 1589-683: originally 1590-684 (see Appendix III): 1590 = 753 plus 27 x 31

Sparta: 1107-738: Kastor's list. 1107 = 486 (Xerxes) plus 27 x 23 (while Troy in 1188 = 486 plus 27 x 26 = two Model periods of 351 years).

Corinth: 1106- or 1099-, both falsely, for Kastor's 1076-754: see Appendix IV.

It appears therefore that the lists are mainly derived from Africanus, and through him, Kastor and pre-Apollodoran sources, while the influence of the Apollodoran school is seen in the alternative dates for Sparta and Corinth, and the mention of Porphyrius in the Mycenaean rubric. Africanus or his source may have combined the pre-Apollodoran date for the Return in 1143 with Kastor's accession of Eurysthenes in 1107 by using a 36-year reign of Aristodemos at Sparta after the manner of Apollodoros.

APPENDIX XI

Comparison of Absolute Dates

Chronographia		Syntomon		Excerpta Barbari	
		Chaldaia	2596-2381		
		Arabia	2380-2181		
Assyria	2056- 817	Assyria	2180- 723	Assyria	2210- 834
		Babylon	765 - 590		
Media	816- 563	Media	816- 563	Media	829- 561
Lydia	767- 548	Lydia	780- 548	Lydia	776- 545
Persia	562-	Persia	562	Persia	559-
Sikyon	2087-1090	Sikyon	2112-1161	Sikyon	2112-1147
Argos	1859-1108	Argos	1917-1440	Argos	1901-1144
		Mycenae	1439-1108		
Athens	1556- 684	Athens	1506- 684	Athens	1589- 683
Sparta	1103- 741	Sparta	1107- 784	Sparta	1107- 738
Corinth	1073- 750	Corinth	1106- 782	Corinth	1106- 783
Troy 1182		Troy 1182		Troy (falsely) 1215 (for 1222).	
Return 1103 "in the 80th year"		Return 1107		Return 1143 "in the 80th year" after 1222.	

KASTOR's Absolute Dates: These may be set out as follows. The chronography of the Argive list finally shows that Kastor's Sardis fell in 546, so that his Lydia began in 777 and Media in 829.

Assyria	2087-829	Sikyon 2087-1129-1090:	2087 = 683 + 1404
Media	829-561	Argos 1859-1108	1859 = 546 + 39 x 33
Lydia	777-546	Athens 1556-684	1556 = 464 + 39 x 28
Persia	560-	Sparta 1107-738-	1107 = 486 + 27 x 23
		Corinth 1076-754	1076 = 486 + 39 x 10
		Sea-powers 1187-478	
		Troy 1188	1188 = 486 + 27 x 26
		Return 1107	1107 = 486 + 27 x 23
		Ionia 1043	1043 = 477 + 39 x 14

APPENDIX XII

The Assyrian Kings

The following list and genealogy is abstracted from A. Poebel: "The Assyrian King List from Khorsabad", in JNES 1 (1942) 247, 460 and 2(1943) 56ff, with the correction of <22> years for (65) Aššur rabi I, in accordance with Albright (e.g. AJA 47 (1943) 491f). For the reliability of the list, see also Schaeffer, Stratigraphie.

I. Kings who lived in tents: 1. Ṭudia, 2.Adamu, 3.Iangi, 4. KITlânu, 5.Ḫarḫaru, 6. Mandaru, 7.Imṣu, 8.ḪARṣu, 9.Didânu, 10.Ḫanû, 11.Zuabu, 12.Nuabu, 13.Abazu, 14.TILlû, 15.Aṣarah 16. Uškpia, 17.Apiašal.

II. Genealogy of the dynasty of Uškpia

16. Uškpia
17. Apiašal
18. Ḫalû
19. Samânu
20. Haiânu
21. Ilumer
22. Iakmesi
23. Iakmeni
24. Iazkur-ilu
25. Ilu-kapkapi
26. Aminu
27. Sulili

III. Kings without genealogy

28. Kikkia
29. Akia

IV. Line of Puzur Aššur I

30. Puzur Aššur I
31. Salim aḫḫe
32. Ilu šumma
33. Erišu I 1874-1835
34. Ikûnu
35. Šarru kîn I
36. Puzur Aššur II
37. Narâm Sîn
38. Erišu II

V. Kings without genealogy

39. Šamši Adad I 1748-16
40. Išme Dagân I 1715-1676
41. Aššur dugul 1675-71
42. Aššur apla iddi 1670
43. Nâṣir Sîn 1670
44. Sîn namir 1670
45. Ipki ištar 1670
46. Adad ṣalûlu 1670

VI. Senior line of Adasi.

47. Adasi 1670
48. Belubani 1669-0
49. Libaiiu 1659-43
50. Šarma Adad I 1642-31
51. ÊN TAR Sîn 1630-19
52. Bazzaiiu 1618-1591
53. Lullaiiu 1590-85
54. ŠU Ninua 1584-71
55. Šarma Adad II 1570-68
56. Erišu III 1567-55
57. Šamši Adad II 1554-49
58. Išme DagânII 1548-33
59. Šamši Adad III 1532-17
60. Aššur nerâri I 1516-1491
61. Puzur Aššur III 1490-77
62. Enlil nâṣir I 1476-64
63. Nur ili 1463-53
64. Aššur šadûni 1452
65. Aššur rabi I 1452-31
66. Aššur nâdin ahhe 1430
67. Enlil nâṣir II 1430-24
68. Aššur nerâri II 1423-17
69. Aššur bêl nišêšu 1461-08
70. Aššur rîm nišêšu 1407-00
71. Aššur nâdin ahhe 1399-90
72. Erîba Adad I 1389-63
73. Aššur uballit I 1362-1327
74. Enlil nerâri 1326-17
75. Arik dên ili 1316-05
76. Adad nerâri I 1304-1273
77. Šulmânu ašarêd I 1272-1243
78. Tukulti Ninurta I 1242-06
79. Aššur nâdin apli 1205-03
80. Aššur nerâri III 1202-1197
81. Enlil kudurra uṣur 1196-2

35 kings in 22 generations and 479 years:
average generation: $21\frac{17}{22}$ years
average reign: $13\frac{14}{35}$ years

VII. Junior Line of Adasi

Nabudan, descendant of 72. Eriba Adad I

82. Ninurta apil Ekur 1191-79

83. Aššur Dân I 1178-1133

84. Ninurta tukulti aššur 1133

85. Mutakkil nusku 1133

86. Aššur rêša iši I 1132-15

87. Tukulti apil ešarra I 1114-1076

88. Ašarêd apil Ekur 1075-4

89. Aššur bêl kala 1073-56

90. Erîba Adad II 1055-4

91. Šamši Adad IV 1053-0

92. Aššur nâṣir apil I 1049-31

93. Šulmânu ašarêd II 1030-19

94. Aššur nerâri IV 1018-13

95. Aššur rabi II 1012-972

96. Aššur reša iši II 971-67

97. Tukulti apil ešarra II 966-35

98. Aššur dan II 934-12

99. Adad nerâri II 911-891

100. Tukulti ninurta II 890-84

101. Aššur nâṣir apli II 883-59

102. Šulmânu ašarêd III 858-24

103. Šamši Adad V 823-11 m. Sammuramat

104. Adad nerâri III 810-783

34 kings in 23 generations and 580 years:
average generation $25\frac{5}{23}$
average reign: $17\frac{2}{34}$ yrs.

105. Šulmânu ašarêd IV 782-73

106. Aššurdan III 772-55

107. Aššur nerâri V 754-45

108. Tukulti apil ešarra III 744-27

109. Šulmânu ašarêd V 726-22

110. Šarru kîn II 721-05

111. Sîn ahhe erîba 704-681 m.Nakîa

112. Aššur aha iddina 680-669

113. Aššur bâni apli 668-c633

114. Aššur etel ilâni c632-629

116. Sîn šarra iškun c623-612